assessment & management of pain
Greetings from Doris Grinspun
Executive Director
Registered Nurses Association of Ontario

It is with great excitement that the Registered Nurses Association of Ontario (RNAO) disseminates this nursing best practice guideline to you. Evidence-based practice supports the excellence in service that nurses are committed to deliver in our day-to-day practice.

We offer our endless thanks to the many institutions and individuals that are making RNAO’s vision for Nursing Best Practice Guidelines (NBPGs) a reality. The Ontario Ministry of Health and Long-Term Care recognized RNAO’s ability to lead this project and is providing multi-year funding. Tazim Virani --NBPG project director-- with her fearless determination and skills, is moving the project forward faster and stronger than ever imagined. The nursing community, with its commitment and passion for excellence in nursing care, is providing the knowledge and countless hours essential to the creation and evaluation of each guideline. Employers have responded enthusiastically to the request for proposals (RFP), and are opening their organizations to pilot test the NBPGs.

Now comes the true test in this phenomenal journey: will nurses utilize the guidelines in their day-to-day practice?

Successful uptake of these NBPGs requires a concerted effort of four groups: nurses themselves, other health-care colleagues, nurse educators in academic and practice settings, and employers. After lodging these guidelines into their minds and hearts, knowledgeable and skillful nurses and nursing students need healthy and supportive work environments to help bring these guidelines to life.

We ask that you share this NBPG, and others, with members of the interdisciplinary team. There is much to learn from one another. Together, we can ensure that Ontarians receive the best possible care every time they come in contact with us. Let’s make them the real winners of this important effort!

RNAO will continue to work hard at developing and evaluating future guidelines. We wish you the best for a successful implementation!

Doris Grinspun, RN, MScN, PhD (candidate)

Executive Director
Registered Nurses Association of Ontario
How to Use this Document

This nursing best practice guideline is a comprehensive document providing resources necessary for the support of evidence based nursing practice. The document needs to be reviewed and applied, based on the specific needs of the organization or practice setting/environment, as well as the needs and wishes of the client. Guidelines should not be applied in a “cookbook” fashion but used as a tool to assist in decision making for individualized client care, as well as ensuring that appropriate structures and supports are in place to provide the best possible care.

Nurses, other health care professionals and administrators who are leading and facilitating practice changes will find this document valuable for the development of policies, procedures, protocols, educational programs, assessment and documentation tools, etc. It is recommended that the nursing best practice guidelines be used as a resource tool. Nurses providing direct client care will benefit from reviewing the recommendations, the evidence in support of the recommendations and the process that was used to develop the guidelines. However, it is highly recommended that practice settings/environments adapt these guidelines in formats that would be user-friendly for daily use.

Organizations wishing to use the guideline may decide to do so in a number of ways:

- Assess current nursing and health care practices using the recommendations in the guideline.
- Identify recommendations that will address identified needs in practice approaches or gaps in services.
- Systematically develop a plan to implement the recommendations using associated tools and resources.

Implementation resources will be made available through the RNAO website to assist individuals and organizations to implement best practice guidelines. RNAO is interested in hearing how you have implemented this guideline. Please contact us to share your story. The story of the pilot implementation site is shared throughout this guideline through comments made by nursing staff, educators and administrators. These comments are quoted from the evaluation report:

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## Acknowledgement

The Registered Nurses Association of Ontario wishes to acknowledge the following for their contribution in reviewing this nursing best practice guideline and providing valuable feedback:

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Thumber Bay Regional Hospital (TBRH)

Northwestern Ontario Regional Cancer Centre (NWORCC)

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Central Park Lodge (CPL)
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*Assessment and Management of Pain*
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Disclaimer
These best practice guidelines are related only to nursing practice and not intended to take into account fiscal efficiencies. These guidelines are not binding for nurses and their use should be flexible to accommodate client/family wishes and local circumstances. They neither constitute a liability nor discharge from liability. While every effort has been made to ensure the accuracy of the contents at the time of publication, neither the authors nor RNAO give any guarantee as to the accuracy of the information contained in them nor accept any liability, with respect to loss, damage, injury or expense arising from any such errors or omissions in the contents of this work. Any reference throughout the document to specific pharmaceutical products as examples does not imply endorsement of any of these products.

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summary of recommendations

Practice Recommendations
PART A- Assessment

Screening for Pain

Recommendation 1
Screen all persons at risk for pain at least once a day by asking the person or family/care provider about the presence of pain, ache or discomfort.
- For children, consider the following:
  - Ask parents the words a child might use to describe pain or observe the child for signs/behaviours indicative of pain.
- Screen for pain when undertaking other routine assessments.
- For the frail elderly, non-verbal or non-cognizant person, screen to assess if the following markers are present:
  - states he/she has pain;
  - experiences change in condition;
  - diagnosed with chronic painful disease;
  - has history of chronic unexpressed pain;
  - taking pain-related medication for >72 hours;
  - has distress related behaviours or facial grimace;
  - indicates that pain is present through family/staff/volunteer observation.

Parameters of Pain Assessment

Recommendation 2
Self-report is the primary source of assessment for verbal, cognitively intact persons. Family/care provider reports of pain are included for children and adults unable to give self-report.

Grade of Recommendation = C

Recommendation 3
A systematic, validated pain assessment tool is selected to assess the parameters of pain, which include:
- location of pain;
- effect of pain on function and activities of daily living (ie. work, interference with usual activities, etc.);
- level of pain at rest and during activity;
- medication usage;
- P - provoking or precipitating factors;
- Q - quality of pain (what words does the person use to describe pain? - aching, throbbing);
- R - radiation of pain (does the pain extend from the site?);
- S - severity of pain (intensity, 0-10 scale); and
- T - timing (occasional, intermittent, constant).

Grade of Recommendation = C
Recommendation 4
A standardized tool with established validity is used to assess the intensity of pain.
- Visual Analogue Scale (VAS);
- Numeric Rating Scale (NRS);
- Verbal Scale;
- Faces Scale;
- Behavioural Scale.

Grade of Recommendation = C

Recommendation 5
Pain assessment also includes physiological and behavioural indicators of pain, and should be included in populations such as infants, children, the cognitively impaired and in persons with acute pain.

Grade of Recommendation = C

Comprehensive Pain Assessment

Recommendation 6
The following parameters are part of a comprehensive pain assessment:
- physical examination, relevant laboratory and diagnostic tests;
- effect and understanding of current illness;
- meaning of pain and distress caused by the pain;
- coping responses to stress and pain;
- effects on activities of daily living (especially in the frail elderly and non-cognizant person);
- psychosocial and spiritual effects;
- psychological - social variables (anxiety, depression);
- situational factors – culture, language, ethnic factors, economic effects of pain and treatment;
- person’s preferences and expectations/beliefs/myths about pain management methods; and
- person’s preferences and response to receiving information related to his/her condition and pain.

Grade of Recommendation = C
Reassessment and Ongoing Assessment of Pain

**Recommendation 7**
Pain is reassessed on a regular basis according to the type and intensity of pain and the treatment plan.
- Pain is reassessed at each new report of pain and new procedure, when intensity increases, and when pain is not relieved by previously effective strategies.
- Pain is reassessed after the intervention has reached peak effect (15-30 minutes after parenteral drug therapy, 1 hour after immediate release analgesic, 4 hours after sustained release analgesic or transdermal patch, 30 minutes after non-pharmacological intervention).
- Acute post-operative pain should be regularly assessed as determined by the operation and severity of pain, with each new report of pain or instance of unexpected pain, and after each analgesic, according to peak effect time.

*Grade of Recommendation = C*

**Recommendation 8**
The following parameters are included in the regular re-assessment of pain:
- current pain intensity, quality and location;
- intensity of pain at its worst in past 24 hours, at rest and on movement;
- extent of pain relief achieved – response (reduction on pain intensity scale);
- barriers to implementing the treatment plan;
- effects of pain on ADLs, sleep and mood;
- side effects of medications for pain treatment (nausea, constipation);
- level of sedation; and
- strategies used to relieve pain, for example:
  - Analgesic doses taken regularly and for breakthrough pain
  - Non-pharmacological interventions:
    - Physical modalities
    - Cognitive/behavioural strategies
    - Rehabilitative strategies
  - Environmental changes
  - Reduction in anxiety.

*Grade of Recommendation = C*

**Recommendation 9**
Unexpected intense pain, particularly if sudden or associated with altered vital signs such as hypotension, tachycardia, or fever, should be immediately evaluated.

*Grade of Recommendation = C*
**Documentation of Pain Assessment**

**Recommendation 10**
Document on a standardized form that captures the person’s pain experience specific to the population and setting of care. Documentation tools will include:
- Initial assessment, comprehensive assessment and re-assessment.
- Monitoring tools that track efficacy of intervention (0-10 scale).

*Grade of Recommendation =C*

**Recommendation 11**
Document pain assessment regularly and routinely on standardized forms that are accessible to all clinicians involved in care.

*Grade of Recommendation =C*

**Recommendation 12**
Teach individuals and families (as proxy recorders) to document pain assessment on the appropriate tools when care is provided. This will facilitate their contributions to the treatment plan and will promote continuity of effective pain management across all settings.

*Grade of Recommendation =C*

**Communicating Findings of a Pain Assessment**

**Recommendation 13**
Validate with persons/care providers that the findings of the pain assessment (health care provider’s and person’s/care provider’s) reflect the individual’s experience of pain.

*Grade of Recommendation =C*

**Recommendation 14**
Communicate to members of the interdisciplinary team pain assessment findings by describing parameters of pain obtained through the use of a structured assessment tool, the relief or lack of relief obtained from treatment methods, person’s goals for pain treatment and the effect of pain on the person.

*Grade of Recommendation =C*
### Recommendation 15
Advocate on behalf of the person for changes to the treatment plan if pain is not being relieved. The nurse will engage in discussion with the interdisciplinary health care team regarding identified need for change in the treatment plan. The nurse supports his/her recommendations with appropriate evidence, providing a clear rationale for the need for change, including:
- intensity of pain using a validated scale;
- change in severity pain scores in last 24 hours;
- change in severity and quality of pain following administration of analgesic and length of time analgesic is effective;
- amount of regular and breakthrough pain medication taken in last 24 hours;
- person’s goals for pain relief;
- effect of unrelieved pain on the person;
- absence/presence of side effects or toxicity; and
- suggestions for specific changes to the treatment plan that are supported by evidence.

*Grade of Recommendation = C*

### Recommendation 16
Provide instruction to the person/care provider on:
- the use of a pain log or diary (provide a tool).
- communicating unrelieved pain to their physician and supporting them in advocating on their own behalf.

*Grade of Recommendation = C*

### Recommendation 17
Report situations of unrelieved pain as an ethical responsibility using all appropriate channels of communication in the organization, including individual/care provider documentation.

*Grade of Recommendation = C*

### Recommendation 18
Refer persons with chronic pain whose pain is not relieved after following standard principles of pain management to:
- a specialist skilled in dealing with the particular type of pain;
- a multidisciplinary team to address the complex emotional, psycho/social, spiritual and concomitant medical factors involved.

*Grade of Recommendation = C*
PART B- Management
Establishing a Plan for Pain Management

Recommendation 19
Establish a plan for management in collaboration with interdisciplinary team members that is consistent with individual and family goals for pain relief, taking into consideration the following factors:
- assessment findings;
- baseline characteristics of pain;
- physical, psychological, and sociocultural factors shaping the experience of pain;
- etiology;
- most effective pharmacological and non-pharmacological strategies; and
- current and future primary treatment plans.

Grade of Recommendation = C

Recommendation 20
Provide individuals and families/care providers with a written copy of the treatment plan to promote their decision-making and active involvement in the management of pain. The plan will be adjusted according to the results of assessment and reassessment. Changes to the treatment plan will be documented and communicated to everyone involved in the implementation of the plan.

Grade of Recommendation = A

Pharmacological Management of Pain
Selecting appropriate analgesics

Recommendation 21
Ensure that the selection of analgesics is individualized to the person, taking into account:
- the type of pain (acute or chronic, nociceptive and/or neuropathic);
- intensity of pain;
- potential for analgesic toxicity (age, renal impairment, peptic ulcer disease, thrombocytopenia);
- general condition of the person;
- concurrent medical conditions;
- response to prior or present medications;
- cost to the person and family; and
- the setting of care.

Grade of Recommendation = A
### Recommendation 22
Advocate for use of the simplest analgesic dosage schedules and least invasive pain management modalities:
- The oral route is the preferred route for chronic pain and for acute pain as healing occurs.
- Tailor the route to the individual pain situation and the care setting.
- Intravenous administration is the parenteral route of choice after major surgery, usually via bolus and continuous infusion.

*Grade of Recommendation = C*

### Recommendation 23
Use a step-wise approach in making recommendations for the selection of analgesics which are appropriate to match the intensity of pain:
- The use of the WHO Analgesic Ladder is recommended for the treatment of chronic cancer pain.
- Pharmacological management of mild to moderate postoperative pain begins with acetaminophen or NSAIDS. However, moderate to severe pain should be treated initially with an opioid analgesic.

*Grade of Recommendation = B*

### Recommendation 24
Advocate for consultation with a pain management expert for complex pain situations which include, but are not limited to:
- pain unresponsive to standard treatment;
- multiple sources of pain;
- mix of neuropathic and nociceptive pain; and
- history of substance abuse.

*Grade of Recommendation = C*

### Recommendation 25
Recognize that acetaminophen or non-steroidal, anti-inflammatory drugs (NSAIDS) are used for the treatment of mild pain and for specific types of pain as adjuvant analgesics unless contraindicated.

*Grade of Recommendation = A*

### Recommendation 26
Recognize that adjuvant drugs are important adjuncts in the treatment of specific types of pain.
- Adjuvant drugs such as anticonvulsants and antidepressants provide independent analgesia for specific types of pain.
- Extra caution is needed in administering antidepressant and anticonvulsant drugs to the elderly who may experience significant anticholinergic and sedative side effects.
Recommendation 27
Recognize that opioids are used for the treatment of moderate to severe pain, unless contraindicated, taking into consideration:
- previous dose of analgesics;
- prior opioid history;
- frequency of administration;
- route of administration;
- incidence and severity of side effects;
- potential for age related adverse effects; and
- renal function.

Grade of Recommendation =A

Recommendation 28
Consider the following pharmacological principles in the use of opioids for the treatment of severe pain:
- Mixed agonist-antagonists (eg. pentazocine) are not administered with opioids because the combination may precipitate a withdrawal syndrome and increase pain.
- The elderly generally receive greater peak and longer duration of action from analgesics than younger individuals, thus dosing should be initiated at lower doses and increased more slowly ("careful titration").
- Special precautions are needed in the use of opioids with neonates and infants under the age of six months. Drug doses, including those for local anaesthetics, should be calculated carefully based on the current or most appropriate weight of the neonate. Initial doses should not exceed maximum recommended amounts.

Grade of Recommendation =B

Recommendation 29
Recognize that meperidine is contraindicated for the treatment of chronic pain.
- Meperidine is not recommended for the treatment of chronic pain due to the build-up of the toxic metabolite normeperidene, which can cause seizures and dysphoria.
- Meperidine may be used in acute pain situations for very brief courses in otherwise healthy individuals who have not demonstrated an unusual reaction (ie. local histamine release at the infusion site) or allergic response to other opioids such as morphine or hydromorphone.
- Meperidine is contraindicated in patients with impaired renal function.

Grade of Recommendation =A
Optimizing pain relief with opioids

Recommendation 30

Ensure that the timing of analgesics is appropriate according to personal characteristics of the individual, pharmacology (ie. duration of action, peak-effect and half-life) and route of the drug.

*Grade of Recommendation =B*

Recommendation 31

Recognize that opioids should be administered on a regular time schedule according to the duration of action and depending on the expectation regarding the duration of severe pain.

- If severe pain is expected for 48 hours post-operatively, routine administration may be needed for that period of time.
- Late in the post-operative course, analgesics may be effective given on an “as needed” basis.
- In chronic cancer pain, opioids are administered on an “around-the-clock” basis, according to their duration of action.
- Long-acting opioids are more appropriate when dose requirements are stable.

*Grade of Recommendation =A*

Recommendation 32

Use principles of dose titration specific to the type of pain to reach the analgesic dose that relieves pain with a minimum of side effects, according to:

- cause of the pain;
- individual’s response to therapy;
- clinical condition;
- concomitant drug use;
- onset and peak effect;
- duration of the analgesic effect;
- age; and
- known pharmacokinetics and pharmacodynamics of the drugs administered. Doses are usually increased every 24 hours for persons with chronic pain on immediate release preparations, and every 48 hours for persons on controlled release opioids. The exception to this is transdermal fentanyl, which can be adjusted every 3 days.

*Grade of Recommendation =B*
Recommendation 33

Promptly treat pain that occurs between regular doses of analgesic (breakthrough pain) using the following principles:

- Breakthrough doses of analgesic in the post-operative situation are dependent on the routine dose of analgesic, the individual’s respiratory rate, and the type of surgery, and are usually administered as bolus medications through PCA pumps.

- Breakthrough doses of analgesic should be administered to the person on an “as needed” basis according to the peak effect of the drug (po/pr = q1h; SC/IM = q 30 min; IV = q 10-15 min).

- It is most effective to use the same opioid for breakthrough pain as that being given for “around-the-clock” dosing.

- Individuals with chronic pain should have:
  - An immediate release opioid available for pain (breakthrough pain) that occurs between the regular administration times of the “around-the-clock” medication.

- Breakthrough doses of analgesic for continuous cancer pain should be calculated as 10-15 per cent of the total 24-hour dose of the routine “around-the-clock” analgesic.

- Breakthrough analgesic doses should be adjusted when the regular “around-the-clock” medication is increased.

- Adjustment to the “around-the-clock” dose is necessary if more than 2-3 doses of breakthrough analgesic are required in a 24-hour period, and pain is not controlled.

Grade of Recommendation = C

Recommendation 34

Use an equianalgesic table to ensure equivalency between analgesics when switching analgesics. Recognize that the safest method when switching from one analgesic to another is to reduce the dose of the new analgesic by one-half in a stable pain situation.

Grade of Recommendation = C
Recommendation 35
Ensure that alternate routes of administration are prescribed when medications cannot be taken orally, taking into consideration individual preferences and the most efficacious and least invasive route.
- The indications for transdermal routes of medication include allergy to morphine, refractory nausea and vomiting, and difficulty swallowing.
- Consider using continuous subcutaneous infusion of opioids in individuals who are experiencing refractory nausea and vomiting, inability to swallow, or require this route to avoid continuous peaks and valleys in pain control.
- The cost of medications and the technology necessary for delivery (e.g. pain pumps) should be taken into consideration in selecting certain alternative routes of administration.
- Consider using a butterfly injection system to administer intermittent subcutaneous analgesics.
- Epidural access must be managed by clinicians with appropriate resources and expertise.

Grade of Recommendation = C

Recommendation 36
Recognize the difference between drug addiction, tolerance and dependency to prevent these from becoming barriers to optimal pain relief.

Grade of Recommendation = A

Recommendation 37
Monitor persons taking opioids who are at risk for respiratory depression recognizing that opioids used for people not in pain, or in doses larger than necessary to control the pain, can slow or stop breathing.
- Respiratory depression develops less frequently in individuals who have their opioid doses titrated appropriately. Those who have been taking opioids for a period of time to control chronic or cancer pain are unlikely to develop this symptom.
- The risk of respiratory depression increases with intravenous or epidural administration of opioids, rapid dose escalation, or renal impairment.

Grade of Recommendation = A

Recommendation 38
Monitor persons taking analgesic medications for side effects and toxicity. Recommend a change in opioid if pain relief is inadequate following appropriate dose titration and if the person has side effects refractory to prophylactic treatment such as myoclonus or confusion. Particular caution should be used when administering analgesics to children and the elderly.

Grade of Recommendation = C
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<td>Evaluate the efficacy of pain relief with analgesics at regular intervals and following a change in dose, route or timing of administration. Advocate for changes in analgesics when inadequate pain relief is observed.</td>
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<td>Seek referral to a pain specialist for individuals who require increasing doses of opioids that are ineffective in controlling pain. Evaluation should include assessment for residual pathology and other pain causes, such as neuropathic pain.</td>
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<tr>
<th>Recommendation</th>
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<tr>
<td><strong>Recommendation 41</strong></td>
<td><strong>B</strong></td>
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<tr>
<td>Anticipate and monitor individuals taking opioids for common side effects such as nausea and vomiting, constipation and drowsiness, and institute prophylactic treatment as appropriate.</td>
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<tr>
<td><strong>Recommendation 42</strong></td>
<td><strong>C</strong></td>
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<tr>
<td>Counsel patients that side effects to opioids can be controlled to ensure adherence with the medication regime.</td>
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<tr>
<td><strong>Recommendation 43</strong></td>
<td><strong>A</strong></td>
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<tr>
<td>Recognize and treat all potential causes of side effects taking into consideration medications that potentiate opioid side effects:</td>
<td></td>
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<tr>
<td>- Sedation – sedatives, tranquilizers, antiemetics.</td>
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<td>- Postural hypotension – antihypertensives, tricyclics.</td>
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<td>- Confusion – phenothiazines, tricyclics, antihistamines and other anticholinergics.</td>
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<tr>
<td><strong>Recommendation 44</strong></td>
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<tr>
<td>Assess all persons taking opioids for the presence of nausea and/or vomiting, paying particular attention to the relationship of the symptom to the timing of analgesic administration.</td>
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<tr>
<td><strong>Recommendation 45</strong></td>
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<tr>
<td>Ensure that persons taking opioid analgesics are prescribed an antiemetic for use on an “as needed” basis with routine administration if nausea/vomiting persists.</td>
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<tr>
<td><strong>Recommendation 46</strong></td>
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<tr>
<td>Recognize that antiemetics have different mechanisms of action and selection of the right antiemetic is based on this understanding and etiology of the symptom.</td>
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Recommendation 47
Assess the effect of the antiemetic on a regular basis to determine relief of nausea/vomiting and advocate for further evaluation if the symptom persists in spite of adequate treatment.

Grade of Recommendation = C

Recommendation 48
Consult with physician regarding switching to a different antiemetic if nausea/vomiting is determined to be related to the opioid, and does not improve with adequate doses of antiemetic.

Grade of Recommendation = C

Constipation
Recommendation 49
Institute prophylactic measures for the treatment of constipation unless contraindicated, and monitor constantly for this side-effect.

- Laxatives should be prescribed and increased as needed to achieve the desired effect as a preventative measure for individuals receiving routine administration of opioids.
  Grade of Recommendation = B
- Osmotic laxatives soften stool and promote peristalsis and may be an effective alternative for individuals who find it difficult to manage an increasing volume of pills.
  Grade of Recommendation = B

Recommendation 50
Counsel individuals on dietary adjustments that enhance bowel peristalsis recognizing personal circumstances (seriously ill individuals may not tolerate) and preferences.

Grade of Recommendation = C

Recommendation 51
Urgently refer persons with refractory constipation accompanied by abdominal pain and/or vomiting to the physician.

Grade of Recommendation = C

Drowsiness/Sedation
Recommendation 52
Recognize that transitory sedation is common and counsel the person and family/care provider that drowsiness is common upon initiation of opioid analgesics and with subsequent dosage increases.

Grade of Recommendation = C

Recommendation 53
Evaluate drowsiness which continues beyond 72 hours to determine the underlying cause and notify the physician of confusion or hallucinations that accompany drowsiness.

Grade of Recommendation = C
Anticipate and prevent procedural pain

**Recommendation 54**

Anticipate pain that may occur during procedures such as medical tests and dressing changes, and combine pharmacologic and non-pharmacologic options for prevention.

*Grade of Recommendation = C*

**Recommendation 55**

Recognize that analgesics and/or local anaesthetics are the foundation for pharmacological management of painful procedures. Anxiolytics and sedatives are specifically for the reduction of associated anxiety. If used alone, anxiolytics and sedatives blunt behavioural responses without relieving pain.

*Grade of Recommendation = C*

**Recommendation 56**

Ensure that skilled supervision and appropriate monitoring procedures are instituted when conscious sedation is used.

*Grade of Recommendation = C*

**Patient and family education**

**Recommendation 57**

Provide the person and their family/care providers with information about their pain and the measures used to treat it, with particular attention focused on correction of myths and strategies for the prevention and treatment of side effects.

*Grade of Recommendation = A*

**Recommendation 58**

Ensure that individuals understand the importance of promptly reporting unrelieved pain, changes in their pain, new sources or types of pain and side effects from analgesics.

*Grade of Recommendation = C*

**Recommendation 59**

Clarify the differences between addiction, tolerance, and physical dependence to alleviate misbeliefs that can prevent optimal use of pharmacological methods for pain management.

- Addiction (psychological dependence) is not physical dependence or tolerance and is rare with persons taking opioids for chronic pain.
- Persons using opioids on a chronic basis for pain control can exhibit signs of tolerance requiring upward adjustments of dosage. However, tolerance is usually not a problem and people can be on the same dose for years.
- Persons who no longer need an opioid after long-term use need to reduce their dose slowly over several weeks to prevent withdrawal symptoms because of physical dependence.

*Grade of Recommendation = A*
## Effective documentation

**Recommendation 60**
Document all pharmacological interventions on a systematic pain record that clearly identifies the effect of analgesic on pain relief. Utilize this record to communicate with interdisciplinary colleagues in the titration of analgesic. The date, time, severity, location and type of pain should all be documented.

*Grade of Recommendation = C*

**Recommendation 61**
Provide the individual and family in the home setting with a simple strategy for documenting the effect of analgesics.

*Grade of Recommendation = C*

## Non-Pharmacological Management of Pain

**Recommendation 62**
Combine pharmacological methods with non-pharmacological methods to achieve effective pain management.

- Non-pharmacological methods of treatment should not be used to substitute for adequate pharmacological management.
- The selection of non-pharmacological methods of treatment should be based on individual preference and the goal of treatment.
- Any potential contraindications to non-pharmacological methods should be considered prior to application.

*Grade of Recommendation = C*

**Recommendation 63**
Institute specific strategies known to be effective for specific types of pain, such as superficial heat and cold, massage, relaxation, imagery and pressure or vibration, unless contraindicated.

*Grade of Recommendation = C*

**Recommendation 64**
Implement psychosocial interventions that facilitate coping of the individual and family early in the course of treatment.

*Grade of Recommendation = B*

**Recommendation 65**
Institute psycho-educational interventions as part of the overall plan of treatment for pain management.

*Grade of Recommendation = A*

**Recommendation 66**
Recognize that cognitive-behavioural strategies combined with a multidisciplinary rehabilitative approach are important strategies for treatment of chronic non-malignant pain.

*Grade of Recommendation = A*
### Education Recommendations

#### Recommendation 67
Nurses prepared at the entry to practice level must have knowledge of the principles of pain assessment and management.

*Grade of Recommendation = C*

#### Recommendation 68
The principles of pain assessment and management should be included in orientation programs and be made available through professional development opportunities in the organization.

*Grade of Recommendation = C*

#### Recommendation 69
Educational programs should be designed to facilitate change in nurses’ knowledge, skills, attitudes and beliefs about pain assessment and management in order to ensure support for new practices.

*Grade of Recommendation = C*

#### Recommendation 70
Educational programs must provide opportunities for the nurse to demonstrate effective practices in pain assessment and management, and must address the resources necessary to support practice (e.g. practice modifications, reminder systems, removal of barriers etc).

*Grade of Recommendation = C*

### Organization & Policy Recommendations

#### Recommendation 71
Nursing regulatory bodies should ensure that Standards of Nursing Practice include the adoption of standards for accountability for pain management.

*Grade of Recommendation = C*

#### Recommendation 72
Health care organizations must have documentation systems in place to support and reinforce standardized pain assessment and management approaches.

*Grade of Recommendation = C*

#### Recommendation 73
Health care organizations must have educational resources available to individuals and families/care providers regarding their participation in achieving adequate pain relief.

*Grade of Recommendation = C*

#### Recommendation 74
Health care organizations must demonstrate their commitment to recognizing pain as a priority problem. Policies must clearly support or direct expectations of staff that satisfactory pain relief is a priority.

*Grade of Recommendation = C*
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<th>Recommendation</th>
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<tr>
<td><strong>Health care organizations must ensure that resources are available to individuals, family/care providers and staff to provide effective pain assessment and management, such as access to experts in pain management.</strong></td>
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<td><strong>Grade of Recommendation = C</strong></td>
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<tr>
<td><strong>Health care organizations need to demonstrate support for an interdisciplinary approach to pain care.</strong></td>
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<td><strong>Grade of Recommendation = C</strong></td>
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<tr>
<td><strong>Health care organizations must have quality improvement systems in place to monitor the quality of pain management across the continuum of care.</strong></td>
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<td><strong>Grade of Recommendation = C</strong></td>
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<tr>
<td><strong>In planning educational strategies, consider the most effective methods for dissemination and implementation of guideline recommendations. These methods include, but are not limited to:</strong></td>
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<td>- the use of a model of behaviour change to guide the development of strategies for implementation.</td>
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<td>- the use of a combination of strategies to influence practice change.</td>
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<td>- designing implementation strategies that take into consideration the influence of the organizational environment.</td>
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<td><strong>Grade of Recommendation = A</strong></td>
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Responsibility for Guideline Development

The Registered Nurses Association of Ontario (RNAO), with funding from the Ontario Ministry of Health and Long-Term Care, has embarked on a multi-year project of nursing best practice guideline development, pilot implementation, evaluation and dissemination. In this second cycle of the project, one of the areas of emphasis is on assessment and management of pain. This guideline was developed by a panel of Registered Nurses convened by the RNAO and conducting its work independent of any bias or influence from the Ontario Ministry of Health and Long-Term Care.
Purpose and Scope

Best practice guidelines are systematically developed statements to assist practitioners’ and clients’ decisions about appropriate health care. This best practice guideline is intended to provide direction to practicing nurses in all care settings, both institutional and community, in the assessment and management of pain, including prevention of pain wherever possible. The guideline incorporates best practices across the setting of both acute and chronic pain with specific recommendations re: specialized populations such as the elderly and children. Nurses working in specialty areas such as pediatrics, gerontology, chronic non-malignant pain, malignant pain, acute trauma and surgical areas will require further practice direction from clinical practice guidelines in their unique area of focus.

This guideline focuses its recommendations on: Practice Recommendations, including pain assessment and management; Education Recommendations for supporting the skills required for nurses; and Organization & Policy Recommendations addressing the importance of a supportive practice environment as an enabling factor for providing high quality nursing care, which includes ongoing evaluation of guideline implementation.

The guideline contains recommendations for best nursing practices in the assessment and management of pain for Registered Nurses (RNs) and Registered Practical Nurses (RPNs). It is acknowledged that the individual competency of nurses varies between nurses and across categories of nursing professionals (RNs and RPNs) and is based on knowledge, skills, attitudes, critical analysis and decision making which is enhanced over time by experience and education. It is anticipated that individual nurses will perform only those aspects of pain assessment and management for which they have received appropriate education and experience, and which are within the scope of their practice.

It is expected that nurses, both RNs and RPNs, will seek appropriate consultation in instances where the patient’s care needs surpass the ability of the individual nurse to act independently. It is acknowledged that effective patient care depends on a coordinated interdisciplinary approach incorporating ongoing communication between health professionals and patients, ever mindful of the personal preferences and unique needs of each individual patient.
Guideline Development Process

In June of 2000, a panel of nurses with expertise in clinical practice and research in pain assessment and management in the acute, chronic, palliative and pediatric pain population, from both institutional and community settings, convened under the auspices of the RNAO.

The first task of the panel was to identify and review existing clinical practice guidelines in order to build on the current understanding of pain management and assessment, and to reach consensus on the scope of the guideline. A systematic literature search in addition to a structured Internet search yielded a set of ten clinical practice guidelines related to the assessment and management of pain. There was strong opinion from the panel that these guidelines were not being used by the majority of nurses to guide their clinical practice. A decision was made by the panel to incorporate existing guidelines with applicability for nurses in the development of this best practice guideline and to create a document that would have clinical utility for practicing nurses.

A quality appraisal was conducted on the ten identified clinical practice guidelines using a tool from Cluzeau et al. (1997). This tool provides a framework for assessing the quality of clinical practice guidelines and facilitates the decision-making process. Each identified guideline was reviewed by a minimum of four appraisers. The scores that resulted from the evaluation of the various guidelines assisted the appraisers to compare guidelines and determine their relative strengths and weaknesses. From this systematic evaluation, four documents were identified as high quality, relevant guidelines appropriate for use in the development of this best practice guideline. Specifically, they were strong in rigour and context/content which the panel identified as being important in terms of the data they required. These guidelines included:


The development panel proceeded to develop a synthesis table of the recommendations from the four selected clinical practice guidelines. Practice recommendations were extracted or adapted from those guidelines that ranked the highest in rigour, context and content, and application (first round). A second round of practice recommendations were extracted from those guidelines which had high ratings for content or where content was relevant and could be supported by existing literature. The panel adapted practice recommendations within these guidelines in order to ensure their applicability to best nursing practice. Systematic and narrative reviews of the literature were used in the development of practice recommendations that could not be extracted from existing guidelines. Panel consensus was obtained for each recommendation.

A draft guideline was submitted to a set of external stakeholders for review. The feedback received was reviewed and incorporated into the final draft guideline. This draft guideline was pilot implemented in selected practice settings in Ontario. Pilot implementation practice settings were identified through a “request for proposal “ process conducted by the RNAO. The implementation phase was evaluated, and the guideline was further refined and prepared for publication after the results of the evaluation were reported, and reviewed by the development panel.
**Interpretation of Evidence:**

Best practice demands that nurses be guided by best available evidence. In order to have the reader understand the strength of the evidence, each recommendation has been cited with a grade of recommendation. The grading system used in this guideline has been adapted from the Scottish Intercollegiate Guidline Network (2000).

**Grades of Recommendations:**

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<td>A</td>
<td>Requires at least one randomized controlled trial as part of a body of literature of overall good quality and consistency addressing the specific recommendations. This grade may include systematic review and/or meta-analysis of randomized controlled trials.</td>
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<tr>
<td>B</td>
<td>Requires the availability of well conducted clinical studies, but no randomized clinical trials on the topic of the recommendation. This includes evidence from well-designed controlled studies without randomization, quasi-experimental studies, and non-experimental studies such as comparative studies, correlational studies, and case studies. The RNAO guideline development panel strongly supports the inclusion of well-designed qualitative studies in this category.</td>
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<tr>
<td>C</td>
<td>Requires evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities. Indicates an absence of directly applicable clinical studies of good quality.</td>
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Definition of Terms
(Please refer to Appendix A for a Glossary of Clinical Terms)

**Breakthrough pain:** Intermittent exacerbations of pain that can occur spontaneously or in relation to specific activity.

**Care Provider:** Any person(s) who helps people with health problems to manage their day-to-day physical and emotional needs in their home setting. Health care professionals need to work with patients and their care providers in institutional settings to make sure they have the knowledge and skills to manage in the home setting.

**Chronic Pain:** Chronic non-malignant pain is pain that persists past the normal time of healing (Merskey & Bogduk, 1994). Chronic pain associated with cancer is pain that exists because of related treatment and/or disease.

**Clinical Practice Guidelines or Best Practice Guidelines:** “Systematically developed statements (based on best available evidence) to assist practitioner and patient decisions about appropriate health care for specific clinical (practice) circumstances” (Field & Lohr, 1990, p. 8).

**Consensus:** Is a process for making policy decisions, not a method for creating new knowledge. At its best, consensus development merely makes the best use of available information, be that scientific data or the collective wisdom of the participants (Black et al., 1999).
Education Recommendations: Statements of educational requirements and educational approaches/strategies for the introduction, implementation and sustainability of the best practice guideline.

Evidence: “An observation, fact or organized body of information offered to support or justify inferences or beliefs in the demonstration of some proposition or matter at issue” (Madjar & Walton, 2001, p. 28).

Incident pain: See “movement-related pain.”

Movement-related pain: A type of breakthrough pain that is related to specific activity, such as eating, defecating, socializing, or walking. Also referred to as incident pain.

Neuropathic pain: Pain that is initiated or caused by a primary lesion or dysfunction in the nervous system; involves the peripheral and/or the central nervous system (Merskey & Bogduk, 1994)

Neuropathic pain described: Neuropathic pain is usually described as sharp, burning, or shooting and is often associated with other symptoms such as numbness or tingling in the affected area.
Nociceptive pain: Pain, which involves a noxious stimulus that is damaging normal tissues and the transmission of this stimulus in a normally functioning nervous system (Merskey & Bogduk, 1994).

Nociceptive pain described: Nociceptive pain after a painful procedure such as surgery is frequently described as sharp and aching. Pain of a somatic origin (eg. bone pain) may be described as dull or aching and is easily localized. Visceral pain (eg. liver pain) is usually more difficult to localize and is often referred to other distant sites from the source.

Nonpharmacological: Refers to treatment of pain by non-drug methods, and includes rehabilitation strategies, physical modalities such as cold and massage, and cognitive-behavioural approaches (AHCPR, 1994).

Organization & Policy Recommendations: Statements of conditions required for a practice setting that enables the successful implementation of the best practice guideline. The conditions for success are largely the responsibility of the organization, although they may have implications for policy at a broader government or societal level.

Practice Recommendations: Statements of best practice directed at the practice of health care professionals that are ideally evidence based.

Stakeholder: A stakeholder is an individual, group or organization with a vested interest in the decisions and actions of organizations who may attempt to influence decisions and actions (Baker et al., 1999). Stakeholders include all individuals or groups who will be directly or indirectly affected by the change or solution to the problem. Stakeholders can be of various types, and can be divided into opponents, supporters and neutrals (Ontario Public Health Association, 1996).

Systematic Review: Application of a rigorous scientific approach to the preparation of a review article (National Health and Medical Research Centre, 1998). Systematic reviews establish where the effects of healthcare are consistent and research results can be applied across populations, settings, and differences in treatment (e.g. dose); and where effects may vary significantly. The use of explicit, systematic methods in reviews limits bias (systematic errors) and reduces chance effects, thus providing more reliable results upon which to draw conclusions and make decisions (Clarke & Oxman, 1999).
Background Context

Pain is one of the most frequent reasons for which individuals seek the assistance of a health care professional. Pain can be a significant burden for individuals, families, society and the health care system. A recent study conducted in five continents by the World Health Organization demonstrated that approximately 22 per cent of the population has suffered from persistent pain over the past year (Gureje, Von Korff, Simon & Gater, 1998). The Michigan Pain Study, a random stratified survey of 1500 Michigan adults, showed that 20 per cent of adults suffer some form of chronic or recurrent pain and noted pain to be a major impact in their lives (EPIC/MRA, 1997). Missed work days and increased visits to the emergency room by 21 per cent of pain sufferers as noted in this study suggests that the societal cost of unrelieved pain is a significant burden to individuals, their families and the health care system.

Unrelieved pain has profound physiological and psychological effects on patients, which can affect their recovery from acute illness, alter their physical and emotional functioning, decrease quality of life, and impair their ability to work. Yet, in spite of these dire consequences, numerous studies continue to report significant incidences of unrelieved pain across all patient populations.

It is estimated that persistent pain caused by metastatic disease is inadequately treated in up to 50 per cent of cancer patients (Cleeland et al., 1994; VonRoen Cleeland & Gonin., 1993; Young, 1999). Studies report that 25-50 per cent of community dwelling older people suffer significant pain and approximately 70 per cent of patients in nursing homes experience unrelieved pain problems (Ferrell, 1991; Helm & Gibson, 1997; Turk & Feldman, 1992). Studies indicate that 50-80 per cent of patients had moderate to severe pain ratings following the administration of analgesics (AHCPR, 1994; McCaffery & Pasero, 1998).
It is difficult to estimate the magnitude of pain in children since pain is often unrecognized and reporting systems differ widely from country to country. Unrecognized and unrelieved pain in children places significant burdens on children and their families. Children in pain can experience irritability, sleep disturbances, eating problems and general distrust of health care professionals. Families may feel inadequate and angry at being unable to prevent or control pain in their child (WHO/IASP, 1998).

The knowledge and resources exist to provide satisfactory pain relief and to improve quality of life for those experiencing significant pain. The Canadian Council on Health Services Accreditation (1995) standards give clear direction to Canadian hospitals that ongoing assessment of the effectiveness of pain management is an expected component of the CCHSA evaluation. The Canadian Pain Society Position Paper on Pain Relief states that patients have the right to the best pain relief possible (Watt-Watson, Clark, Finley & Watson, 1999).

Nurses can assume a pivotal role in pain management by utilizing current knowledge of pain relieving measures and by adopting best practices in pain assessment and management. Nurses are legally and ethically obligated to advocate for patients within the health care system to ensure that the most effective pain relieving strategies are utilized in promoting patient comfort and the relief of pain.

“We’ve noticed a big change in some of the residents, we’ve been struggling with for a long time as far as trying to keep them comfortable. We’ve noticed a big difference in their comfort level. We’ve had a lot of family comments that their loved ones seem much more comfortable and relaxed. Some of them are eating better. So I’d say in this facility it’s had a big impact.” (Pilot Implementation Site)
Guiding Principles of Pain Assessment and Management

The following guiding principles of pain assessment and management have been drawn from various position statements reviewed as part of the guideline development process.

The RNAO guideline development panel has identified and reached consensus on the following principles that guide the nurse in pain assessment and management:

- Patients have the right to the best pain relief possible.
- Unrelieved acute pain has consequences and nurses should prevent pain where possible.
- Unrelieved pain requires a critical analysis of pain-related factors and interventions.
- Pain is a subjective, multidimensional and highly variable experience for everyone regardless of age or special needs.
- Nurses are legally and ethically obligated to advocate for change in the treatment plan where pain relief is inadequate.
- Collaboration with patients and families is required in making pain management decisions.
- Effective pain assessment and management is multidimensional in scope and requires coordinated interdisciplinary intervention.
- Clinical competency in pain assessment and management demands ongoing education.
- Effective use of opioid analgesics should facilitate routine activities such as ambulation, physical therapy, and activities of daily living.
- Nurses are obligated to participate in formal evaluation of the processes and outcomes of pain management at the organizational level.
- Nurses have a responsibility to negotiate along with other health professionals for organizational change to facilitate improved pain management practices.
- Nurses advocate for policy change and resource allocation that will support effective pain management.
Practice Recommendations

PART A – ASSESSMENT

Screening for Pain

Recommendation • 1

Screen all persons at risk for pain at least once a day by asking the person or family/care provider about the presence of pain, ache or discomfort.

*Grade of Recommendation = C*

- For children, consider the following:
  - Ask parents the words a child might use to describe pain or observe the child for signs/behaviours indicative of pain.
  - Screen for pain when undertaking other routine assessments.

- For the frail elderly, non-verbal or non-cognizant person, screen to assess if the following markers are present:
  - states he/she has pain;
  - experiences change in condition;
  - diagnosed with chronic painful disease;
  - has history of chronic unexpressed pain;
  - taking pain-related medication for >72 hours;
  - has distress related behaviours or facial grimace;
  - indicates that pain is present through family/staff/volunteer observation.

Discussion of Evidence

With a focus on health promotion and the improvement of care outcomes, successful pain management begins with screening for the presence of pain. In an effort to overcome this barrier and to make pain a priority, the Joint Commission on Accreditation of Healthcare Organizations (2000) standards now advocates assessment of pain as the fifth vital sign (Lynch, 2001; Merboth & Barnason, 2000).

All patients at risk should be screened including vulnerable populations (e.g. neonates, infants, children, elderly, non-communicative, cognitively impaired patients, those with life threatening illness) using a validated intensity tool e.g. (0-10) (AHCPR, 1994). Any older person reporting to a health care facility should be routinely screened for the presence of pain (American Geriatric Society, 1998).
Parameters of Pain Assessment

Recommendation • 2
Self-report is the primary source of assessment for verbal, cognitively intact persons. Family/care provider reports of pain are included for children and adults unable to give self-report. *(Grade of Recommendation = C)*

Recommendation • 3
A systematic, validated pain assessment tool is selected to assess the parameters of pain, which include: *(Grade of Recommendation = C)*

- location of pain;
- effect of pain on function and activities of daily living (ie. work, interference with usual activities, etc.);
- level of pain at rest and during activity;
- medication usage;
- P - provoking or precipitating factors;
- Q - quality of pain (what words does the person use to describe pain? - aching, throbbing);
- R - radiation of pain (does the pain extend from the site?);
- S - severity of pain (intensity, 0-10 scale); and
- T - timing (occasional, intermittent, constant).

Recommendation • 4
A standardized tool with established validity is used to assess the intensity of pain. *(Grade of Recommendation = C)*

- Visual Analogue Scale (VAS);
- Numeric Rating Scale (NRS);
- Verbal Scale;
- Faces Scale;
- Behavioural Scale.
Recommendation • 5

Pain assessment also includes physiological and behavioural indicators of pain and should be included in populations such as infants, children, the cognitively impaired and in persons with acute pain. *(Grade of Recommendation = C)*

In the non-verbal, cognitively impaired person:

a. Absence indicators
   - flat affect;
   - decreased interaction;
   - decreased intake; and
   - altered sleep pattern.

b. Active indicators
   - rocking;
   - negative vocalization;
   - frown or grimacing;
   - noisy breathing;

   - irritability; and
   - agitation.

In children:

Discussion of Evidence

Accurate assessment and diagnosis of the type of pain, its severity, and its effect on the person are necessary to plan appropriate interventions or treatments, and are an integral part of overall clinical assessment *(SIGN, 2000)*. Health professionals should ask about pain and the person's self-report should be the primary source of assessment with attention to the person's ability to carry out activities of daily living and general functioning *(AHCPR, 1994; McCaffery & Pasero, 1998)*. People should be given information and instruction about pain assessment and management and be encouraged to take an active role in their pain management *(SIGN, 2000)*. The person and their family should be assessed with regard to their understanding and accurate use of the selected tool, and education should be provided on the use of the tool *(RCN, 1999)*. 

In infants:

- crying facial expression;
- motor responses;
- body posture;
- activity;
- undue quietness;

   - restlessness; and
   - appearance.

- rocking;
- negative vocalization;
- frown or grimacing;
- noisy breathing;

- irritability; and
- agitation.
Diagnosis of the cause of the pain and the functional and psychosocial impact is achieved by a full assessment, which includes a history, physical examination, investigations, and standardized assessment tools (SIGN, 2000). A baseline assessment should be completed on all patients, including adults and children who report the presence of pain and/or have physiological and behavioural indicators of pain (AHCPR, 1992; McCaffery & Pasero, 1998; RCN, 1999). A simple validated assessment tool such as the Numerical Rating Scale (NRS) which rates pain intensity and relief on a scale of 0 to 10 should be used in the ongoing assessment of pain (AHCPR 1994; SIGN, 2000). Other tools include the visual analogue scale (VAS) and the verbal rating scale (VRS), which are considered to have good reliability and construct validity (Briggs & Closs, 1999). Other dimensions of pain such as mood need to be assessed as well (SIGN, 2000). The choice of scale should be based on the person’s preferences, age, cognitive function and language and the same scale should be used each time pain is assessed and during the same level of activity (AHCPR, 1992; American Pain Society, 1999). Tailoring of tools is necessary for people with developmental delay, learning disabilities, cognitive impairment and/or emotional disturbance (ICSI, 2001; RCN, 1999; SIGN, 2000).

Pain terminology typically used by the person to describe the pain such as the use of the word ache and/or discomfort should be assessed and the term used in the ongoing assessment (McCaffery & Pasero, 1998). People’s preferences and expectations/beliefs/myths about pain management methods and for receiving information about pain management should be part of the initial assessment (RNAO panel consensus).

*Infants/Children:*
Assessment strategies need to be tailored to the child’s developmental level and personality style and to the situation. It is important to obtain from the child or parent the word the child uses for pain (e.g. hurt, boo boo) (AHCPR, 1992). Parent’s assessment of their child’s pain should not over-ride the child’s report. However, when children are unwilling or unable to give a self-report, family reports of pain should be used and incorporated as part of the assessment of the child’s pain (RCN, 1999). Changes in children’s behaviour, appearance, activity level, and vital signs are important to note as these may indicate a change in pain intensity (RCN, 1999).

Behavioural measures can reliably and validly indicate that infants are experiencing pain, and should be used in preverbal and nonverbal children. These measures include: crying, facial expressions, motor responses, body posture, activity, undue quietness, restlessness and appearance (RCN, 1999).
**Elderly:**
Older people may present substantial barriers to accurate pain assessment. They may be reluctant to report pain despite substantial physical or psychological impairment. Sensory and cognitive impairment, common among frail older people, make communication more difficult. The American Geriatric Society Panel on Chronic Pain in Older Persons states that even people with mild to moderate cognitive impairment can be assessed with simple questions and screening tools. Reports from caregivers should also be sought out. (AGS, 1998).

**Post-operative:**
Assessment and management of post-operative pain leads to reduced incidence of chronic pain. Physiological responses to pain (e.g., heart and respiratory rate) and behavioural responses should be assessed in the post-operative patient (AHCPR, 1992).

Please refer to Appendix B for sample tools for neonates, infants, and children; Appendix C and D for suggested questions to ask for a baseline assessment of pain; and Appendix E for sample tools for assessment of pain in adults.

**Comprehensive Pain Assessment**

**Recommendation • 6**

The following parameters are part of a comprehensive pain assessment:

*Grade of Recommendation = C*

- physical examination, relevant laboratory and diagnostic tests;
- effect and understanding of current illness;
- meaning of pain and distress caused by the pain;
- coping responses to stress and pain;
- effects on activities of daily living (especially in the frail elderly and non-cognizant person);
- psychosocial and spiritual effects;
- psychological - social variables (anxiety, depression);
- situational factors – culture, language, ethnic factors, economic effects of pain and treatment;
- person’s preferences and expectations/beliefs/myths about pain management methods; and
- person’s preferences and response to receiving information related to his/her condition and pain.
Discussion of Evidence

A comprehensive assessment of pain completed by members of an interdisciplinary team is necessary for people with persistent and chronic pain. This assessment needs to be completed in collaboration with interdisciplinary colleagues including completion of a physical examination, medical history, review of relevant laboratory and other diagnostic tests, medication history including over the counter drugs, alternative and complementary therapies (AHCPR, 1994; SIGN, 2000).

The initial evaluation of pain should include: detailed history (including an assessment of the pain intensity and character), physical examination (emphasizing the neurological examination), psychosocial assessment, and appropriate diagnostic work up to determine the cause of the pain (AHCPR, 1994; SIGN, 2000). The person's wishes and goals must be determined and the team treating the person should center on this (SIGN, 2000). Assessment of pain includes factors that relate to pain tolerance (SIGN, 2000).

Once a baseline assessment has been completed, the effects of the pain on the person should be assessed in the following areas: effect and understanding of current illness, meaning of the pain, individual’s typical coping responses to stress and pain, economic effect of the pain and its treatment, distress caused by the pain, and concerns about the use of opioid, anxiolytic or other medications (RNAO panel consensus). Consideration must be given to the sociocultural variables (ethnicity, religion) and situational factors that may influence pain behaviour and perception (McCaffery & Pasero, 1998; SIGN, 2000).

It is important to recognize the differences between nociceptive and neuropathic pain, which differ in their etiologies, symptoms, response to analgesia, and management strategies (AHCPR, 1994).

“We actually noticed a big difference even with each other. We have meetings and discuss it [pain]. We have been assessing it more and dealing with it more...not pushing it aside anymore as it was before.” (Pilot Implementation Site)
Reassessment and Ongoing Assessment of Pain

**Recommendation • 7**

Pain is reassessed on a regular basis according to the type and intensity of pain and the treatment plan. *(Grade of Recommendation = C)*

- Pain is reassessed at each new report of pain and new procedure, when intensity increases, and when pain is not relieved by previously effective strategies.
- Pain is reassessed after the intervention has reached peak effect (15-30 minutes after parenteral drug therapy, 1 hour after immediate release analgesic, 4 hours after sustained release analgesic or transdermal patch, 30 minutes after non-pharmacological intervention).
- Acute post-operative pain should be regularly assessed as determined by the operation and severity of pain, with each new report of pain or instance of unexpected pain, and after each analgesic, according to peak effect time.

**Recommendation • 8**

The following parameters are included in the regular re-assessment of pain: *(Grade of Recommendation = C)*

- current pain intensity, quality and location;
- intensity of pain at its worst in past 24 hours, at rest and on movement;
- extent of pain relief achieved – response (reduction on pain intensity scale);
- barriers to implementing the treatment plan;
- effects of pain on ADL’s, sleep and mood;
- side effects of medications for pain treatment (nausea, constipation);
- level of sedation; and
- strategies used to relieve pain, for example:
  - Analgesic doses taken regularly and for breakthrough pain
  - Non-pharmacological interventions:
    - Physical modalities
    - Cognitive/behavioural strategies
    - Rehabilitative strategies
    - Environmental changes
    - Reduction in anxiety.
Recommendation • 9

Unexpected intense pain, particularly if sudden or associated with altered vital signs such as hypotension, tachycardia, or fever, should be immediately evaluated.

(Grade of Recommendation = C)

Discussion of Evidence

Pain should be assessed and documented on a regular basis according to type and intensity, after starting the treatment plan, with each new report of pain, and at a suitable interval after each pharmacological or non-pharmacological intervention (i.e., 15 to 30 minutes after parenteral drug therapy and 1 hour after oral administration) (AHCPR, 1994; RCN, 1999). Clinicians should be aware of common pain syndromes: this prompt recognition may hasten therapy and minimize the morbidity of unrelieved pain (AHCPR, 1994).

Pain should be reassessed at each new report of pain, with increased intensity of pain and when pain is not relieved by previously effective strategies (AHCPR, 1994). Changes in pain patterns or the development of new pain should not be attributed to pre-existing causes, but instead should trigger diagnostic evaluation (AHCPR, 1994). Unexpected intense pain, particularly if sudden or associated with altered vital signs such as hypotension, tachycardia, or fever should be immediately evaluated (AHCPR, 1992; RCN, 1999).

For people of all ages, interventions for managing procedure-related pain and distress should take into account the type of procedure, the anticipated level of pain, and individual factors such as age, emotional and physical conditions (AHCPR, 1994).

People with persistent chronic pain non-responsive to usual treatment should be referred to a specialist in the particular type of pain syndrome for comprehensive assessment and further evaluation (RNAO panel consensus). A specialty consult involving surgery, orthopaedics and anaesthesia or other specialties may be deemed necessary (ICSI, 2001).
Documentation of Pain Assessment

**Recommendation • 10**

Document on a standardized form that captures the person’s pain experience specific to the population and setting of care. Documentation tools will include:

*(Grade of Recommendation = C)*

- Initial assessment, comprehensive assessment and re-assessment.
- Monitoring tools that track efficacy of interventions (0-10 scale).

**Recommendation • 11**

Document pain assessment regularly and routinely on standardized forms that are accessible to all clinicians involved in care. *(Grade of Recommendation = C)*

**Recommendation • 12**

Teach individuals and their families (as proxy recorders) to document pain assessment on the appropriate tools when care is provided. This will facilitate their contributions to the treatment plan and will promote continuity of effective pain management across all settings. *(Grade of Recommendation = C)*

**Discussion of Evidence**

Documentation of the assessment/reassessment of pain with a standardized tool on a regular basis is required. This may be accomplished by the nurse or by teaching the person and family/care providers to self-report/report and document the findings. Assess the patient and family’s understanding and accurate use of the selected tool and provide education on the use of the tool *(RCN, 1999)*.

A brief, comprehensive, easy to use validated assessment/monitoring tool that reliably documents pain intensity and pain relief and relates to other dimensions of pain, such as mood, should be selected. The same monitoring tool for pain should be used routinely and regularly and may need to be tailored for the patient care setting in which it is used *(AHCPR, 1994; McCaffery & Paserto, 1998)*. The monitoring tool should be kept where the team members all have access to the information *(deRond, deWit, vanDam & Muller, 2000)*.
Assessment tools should be appropriate for the cognitive ability of the patient and the age of children (McCaffery & Pasero, 1998; RCN, 1999). Tailoring of tools is necessary for any individual with developmental delay, learning disabilities, emotional disturbances, and language barriers (ICSI, 2001; RCN, 1999; SIGN, 2000).

Please refer to Appendix B and E for a variety of assessment and documentation tools.

**Communicating Findings of a Pain Assessment**

**Recommendation • 13**

Validate with persons/care providers that the findings of the pain assessment (health care provider's and person's/care provider's) reflect the individual's experience of pain.

(*Grade of Recommendation = C*)

**Recommendation • 14**

Communicate to members of the interdisciplinary team pain assessment findings by describing parameters of pain obtained through the use of a structured assessment tool, the relief or lack of relief obtained from treatment methods, person's goals for pain treatment and the effect of pain on the person. (*Grade of Recommendation = C*)
### Recommendation • 15
Advocate on behalf of the person for changes to the treatment plan if pain is not being relieved. The nurse will engage in discussion with the interdisciplinary health care team regarding identified need for change in the treatment plan. The nurse supports his/her recommendations with appropriate evidence, providing a clear rationale for the need for change, including: *(Grade of Recommendation = C)*

- intensity of pain using a validated scale;
- change in severity pain scores in last 24 hours;
- change in severity and quality of pain following administration of analgesic and length of time analgesic is effective;
- amount of regular and breakthrough pain medication taken in last 24 hours;
- person’s goals for pain relief;
- effect of unrelieved pain on the person;
- absence/presence of side effects or toxicity; and
- suggestions for specific changes to the treatment plan that are supported by evidence.

### Recommendation • 16
Provide instruction to the person/care provider on: *(Grade of Recommendation = C)*

- the use of a pain log or diary (provide a tool).
- communicating unrelieved pain to their physician and supporting them in advocating on their own behalf.

### Recommendation • 17
Report situations of unrelieved pain as an ethical responsibility using all appropriate channels of communication in the organization, including individual/care provider documentation. *(Grade of Recommendation = C)*

### Recommendation • 18
Refer persons with chronic pain whose pain is not relieved after following standard principles of pain management to: *(Grade of Recommendation = C)*

- a specialist skilled in dealing with the particular type of pain;
- a multidisciplinary team to address the complex emotional, psycho/social, spiritual and concomitant medical factors involved.
Discussion of Evidence
On a regular ongoing basis, communicate and discuss all parameters of the pain assessment with the person, the family/care provider, colleagues, physicians and other health professionals in all settings. Initiate and coordinate referral to specialists when required.

The nurse has an ethical responsibility to represent the experience of the person with pain by assessing the presence of pain, and advocating on his/her behalf according to the organization's guidelines (RNAO panel consensus). Once pain is recognized, nurses and other health care professionals who are knowledgeable about pain assessment and management can work with individuals to establish personal pain management plans (Lynch, 2001). Individuals should be given a written pain management plan that includes client and family/care provider education that is accurate and understandable regarding pain and use of medication (AHCPR, 1992; AHCPR, 1994). Clear, concise and ongoing communication among all members of the interdisciplinary team is an essential aspect of pain management (SIGN, 2000).

Pain management should be evaluated at point of transfer (transmission) in the provision of services to ensure that optimal pain management is achieved and maintained (AHCPR, 1994).

Appendices - Pain Assessment:
Appendix B – Pain Assessment Tools for Neonates, Infants and Children
Appendix C – Sample Questions for Baseline Assessment of Pain
Appendix D – Supplementary Questions for Assessment of Pain
Appendix E – Pain Assessment Tools for Adults

“They [staff] found that they were encouraged to advocate for the patient in the way the pain was being managed. That bit of understanding they gained from the resource nurses as they did their presentation gave them the support they needed to advocate.” (Pilot Implementation Site)
PART B – PAIN MANAGEMENT

**Effective pain management** is dependent upon accurate assessment of pain and the development of a holistic approach to pain that includes both non-pharmacological and pharmacological methods for treatment. It is acknowledged that effective pain management depends on a coordinated, interdisciplinary approach with the client’s goals coordinating the actions of the health care team. Nurses play an important role, in collaboration with interdisciplinary colleagues, in selecting appropriate methods for the treatment of pain in response to the person’s experience. Nurses also evaluate the effectiveness of pain management interventions and advocate for changes in the treatment plan to ensure ongoing pain relief.

Nurses perform both independent and dependent functions in pain management depending on their scope of practice. Independently, nurses with a sound knowledge of pharmacological principles can make recommendations for medications known to be effective in the treatment of pain and can implement non-pharmacological measures complementary to pharmacological treatment. Nurses in their dependent role work collaboratively with physicians in selecting pharmacological treatments that are known to be effective based on patient characteristics, the type of pain, knowledge of pharmacokinetics and pharmacodynamics, and in performing specific functions necessary in the effective use of pharmacological measures.

Nurses perform a number of important functions in the pharmacological management of pain in collaboration with physician colleagues depending on their scope of practice, which are essential in effective pain treatment. Essential functions include establishing a plan for pain management, selecting appropriate analgesics, optimizing pain relief, monitoring safety and efficacy, anticipating side effects, preventing procedural pain, education of persons experiencing pain and their families, and documenting effectively.

This section of the guideline is intended to guide nurses in the performance of these functions, which are considered applicable across differing pain types. This information is a general best practice guide and does not replace the specific pharmacological knowledge necessary in the treatment of specific pain types. Nurses should refer to best practice guidelines for substantive recommendations related to specific types of pain such as acute pain guidelines or cancer pain guidelines.
Establishing a Plan for Pain Management

**Recommendation • 19**  
Establish a plan for management in collaboration with interdisciplinary team members that is consistent with individual and family goals for pain relief, taking into consideration the following factors: *(Grade of Recommendation = C)*

- assessment findings;
- baseline characteristics of pain;
- physical, psychological, and sociocultural factors shaping the experience of pain;
- etiology;
- most effective pharmacological and non-pharmacological strategies;
- management interventions; and
- current and future primary treatment plans.

**Recommendation • 20**  
Provide individuals and families/care providers with a written copy of the treatment plan to promote their decision-making and active involvement in the management of pain. The plan will be adjusted according to the results of assessment and reassessment. Changes to the treatment plan will be documented and communicated to everyone involved in the implementation of the plan. *(Grade of Recommendation = A)*

**Discussion of Evidence**  
The Agency for Health Care Policy and Research (1994) recommends that persons with pain and their families, particularly parents in the situation of children, should be included in the decision-making process in the selection of pharmacological and non-pharmacological methods for the treatment of pain. In addition, they recommend that persons be provided with a written care plan.

Where possible, establish a single physician who is responsible for the pharmacological plan of pain management. Persons with chronic conditions often see more than one medical doctor and are often unclear about who to talk to regarding concerns about the pain management plan. Nurses and other health care professionals can direct their assessment and information to a single medical colleague.
Persons and family members need to be offered information and education regarding the principles of pain management in order to support the development of patient goals, evaluation of the risks/benefits of interventions and adherence with the plan. The person's wishes and goals within the context of what the team can realistically offer drives the development of the care plan. Documentation of the care plan in a centrally located place accessible to all members of the team is necessary for communication and evaluation of the plan.

I. PHARMACOLOGICAL MANAGEMENT OF PAIN

Selecting Appropriate Analgesics

**Recommendation • 21**

Ensure that the selection of analgesics is individualized to the person, taking into account:

* (Grade of Recommendation = A)
  - the type of pain (acute or chronic, nociceptive and/or neuropathic);
  - intensity of pain;
  - potential for analgesic toxicity (age, renal impairment, peptic ulcer disease, thrombocytopenia);
  - general condition of the person;
  - concurrent medical conditions;
  - response to prior or present medications;
  - cost to the person and family; and
  - the setting of care.

**Recommendation • 22**

Advocate for use of the simplest analgesic dosage schedules and least invasive pain management modalities: *(Grade of Recommendation = C)*

* The oral route is the preferred route for chronic pain and for acute pain as healing occurs.
* Tailor the route to the individual pain situation and the care setting.
* Intravenous administration is the parenteral route of choice after major surgery, usually via bolus and continuous infusion.
* The intramuscular route is not recommended for adults or infants/children because it is painful and not reliable. *(Grade of Recommendation=B)*
### Recommendation • 23

Use a step-wise approach in making recommendations for the selection of analgesics which are appropriate to match the intensity of pain: *(Grade of Recommendation = B)*

- The use of the WHO Analgesic Ladder is recommended for the treatment of chronic cancer pain.
- Pharmacological management of mild to moderate postoperative pain begins with acetaminophen or NSAIDS. However, moderate to severe pain should be treated initially with an opioid analgesic.

### Recommendation • 24

Advocate for consultation with a pain management expert for complex pain situations which include, but are not limited to: *(Grade of Recommendation = C)*

- pain unresponsive to standard treatment;
- multiple sources of pain;
- mix of neuropathic and nociceptive pain; and
- history of substance abuse.

### Recommendation • 25

Recognize that acetaminophen or non-steroidal, anti-inflammatory drugs (NSAIDs) are used for the treatment of mild pain and for specific types of pain as adjuvant analgesics unless contraindicated. *(Grade of Recommendation = A)*

### Recommendation • 26

Recognize that adjuvant drugs are important adjuncts in the treatment of specific types of pain. *(Grade of Recommendation = B)*

- Adjuvant drugs such as anticonvulsants and antidepressants provide independent analgesia for specific types of pain.
- Extra caution is needed in administering antidepressant and anticonvulsant drugs to the elderly who may experience significant anticholinergic and sedative side effects.
Recommendation • 27
Recognize that opioids are used for the treatment of moderate to severe pain, unless contraindicated, taking into consideration: (Grade of Recommendation = A)
- previous dose of analgesics;
- prior opioid history;
- frequency of administration;
- route of administration;
- incidence and severity of side effects;
- potential for age related adverse effects; and
- renal function

Recommendation • 28
Consider the following pharmacological principles in the use of opioids for the treatment of severe pain: (Grade of Recommendation = B)
- Mixed agonist-antagonists (e.g., pentazocine) are not administered with opioids because the combination may precipitate a withdrawal syndrome and increase pain.
- The elderly generally receive greater peak and longer duration of action from analgesics than younger individuals, thus dosing should be initiated at lower doses and increased more slowly (“careful titration”).
- Special precautions are needed in the use of opioids with neonates and infants under the age of six months. Drug doses, including those for local anaesthetics, should be calculated carefully based on the current or most appropriate weight of the neonate. Initial doses should not exceed maximum recommended amounts.

Recommendation • 29
Recognize that meperidine is contraindicated for the treatment of chronic pain: (Grade of Recommendation = A)
- Meperidine is not recommended for the treatment of chronic pain due to the build-up of the toxic metabolite normeperidene, which can cause seizures and dysphoria.
- Meperidine may be used in acute pain situations for very brief courses in otherwise healthy individuals who have not demonstrated an unusual reaction (i.e., local histamine release at the infusion site) or allergic response to other opioids such as morphine or hydromorphone.
- Meperidine is contraindicated in patients with impaired renal function.
Discussion of Evidence

Substantive recommendations in the selection and use of analgesic medication as described above are based on recommendations from the AHCPR Acute and Cancer Pain Guidelines (1992, 1994) and are consistent with the level of evidence described in these monographs. Additional sources of evidence were also reviewed and support these recommendations, and these are described below.

As Jovey (2002) has noted, most pain can be effectively controlled if the appropriate analgesic is selected, at the right dose by the right route and individualized to the patient. AHCPR (1994) recommends from randomized clinical trials that medications be individualized to the patient. In addition, it has been documented through observational studies that using a step-wise approach to the selection of analgesic for improved pain relief is noted to be effective. Evidence obtained through audits indicates that 80 per cent of patients noted relief of pain when treated by following the WHO analgesic guidelines (McQuay and Moore, 1998). A description of the WHO Analgesic Ladder is provided in Appendix F.

An important step in the management of pain is starting with simple analgesics and medications that are effective in the treatment of mild pain or as important adjuncts to specific types of surgical procedures. A meta-analysis demonstrated that NSAIDS alone produced as effective analgesia as single or multiple doses of weak opioids alone or in combination with non-opioid analgesics (Eisenberg, Berkey, Carr, Mosteller, & Chalmers, 1994). AHCPR (1994) noted evidence from at least one randomized controlled trial for the use of NSAIDs for their opioid sparing effects and for the treatment of mild to moderate pain. The following contraindications should be taken into consideration however, in using acetaminophen and NSAIDs:

- The total 24-hour dose of acetaminophen should not exceed 4 grams in the well adult population for short-term use because of the potential for liver toxicity. Lower 24-hour doses are recommended for persons with risk factors for liver toxicity (2.6 g/day) and with chronic use (3.2 grams/day) (Jovey, 2002, p. 52).
- Non-steroidal anti-inflammatory drugs should be used with caution for persons with history of peptic ulcer disease, bleeding disorders, abnormal and/or diminished renal function and concomitant use of steroids, and anticoagulants.
- NSAIDS have a ceiling (maximum dose) that should not be exceeded (Canadian Pharmacists Association, 2002).
- Additional precautions are required in the long-term use of NSAIDS in the elderly.
- Acetaminophen is the non-opioid of choice in children (maximum dose 75mg/kg/day).
A systematic review demonstrated that opioids are the mainstay of treatment for moderate to severe pain and their use is well accepted in the treatment of post-operative pain and in managing chronic cancer pain (McQuay & Moore, 1998). McQuay and Moore (1998) note that there is little compelling evidence that one opioid is better than another, but there is evidence that meperidine has a specific disadvantage since when given in multiple doses the toxic metabolite normeperidene, a central nervous system irritant, accumulates resulting in seizures. Active metabolites morphine 6-gluconuride are also noted for morphine and related compounds in patients with renal dysfunction resulting in possible side effects such as nausea/vomiting and myoclonus such that a reduction in doses or a change in opioid may be needed (Glare, Walsh & Pippenger, 1990; Hagen et al., 1991; Portenoy & Kanner, 1996). The key principle for pain management is to titrate the analgesic dose to achieve the pain relief desired while minimizing unwanted side effects.

The following factors should be taken into consideration in selecting opioids: previous experience with opioids; pain pattern; presence of renal, gastrointestinal or cognitive dysfunction; lifestyle; and existing medication use (Jovey, 2002). Nurses should consult specific clinical practice guidelines depending on the specific type of pain in the selection of appropriate analgesics.

The most efficacious method for treating differing types of chronic non-malignant pain remains controversial. However, an increasing number of randomized controlled trials have also documented the efficacy of scheduled oral opioids titrated carefully in chronic non-cancer pain when used in combination with behavioural and cognitive-behavioural therapy for properly selected and monitored patients (College of Physicians and Surgeons of Ontario, 2000). The Canadian Pain Society (1998) supports the use of opioids for the management of chronic non-cancer pain in carefully selected patients. In 1993 the College of Physicians and Surgeons of Alberta became the first professional licensing body in North America to publish guidelines for the use of opioids in chronic non-malignant pain. The Canadian Medical Association has since adopted these guidelines.

Similarly the American Geriatric Society Panel on Chronic Pain in Older Persons (1998) endorses opioids in the management of cancer pain, acute and post-operative pain and has broadened the scope to include chronic non-malignant pain in the care of the elderly. Although older people are more likely to experience adverse reactions, opioids are safe and effective for use in this population. The adage to "start low and go slow is probably appropriate..."
for most drugs known to have high side effect profiles in the older adult” (AGS, 1998, p. 639). In reality, dosing for most patients requires careful titration including frequent assessment and dosing adjustment to optimize pain relief while monitoring and managing side effects.

Young infants, especially those who are premature, are susceptible to apnea and respiratory depression with the use of systemic opioids. Dose reduction and intensive monitoring are required for infants up to six months of age and all children. The initial opioid dose, calculated in mg per kilogram, should be one-forth to one-third of the dose recommended for older children (AHCPR, 1992).

Diabetic neuropathy is the model used to guide the use of adjuvant drugs such as anticonvulsants and antidepressants in the treatment of chronic neuropathic pain since most of the randomized trials have been conducted in this population. Adjuvant drugs are used to enhance the analgesic efficacy of opioids, treat concurrent symptoms that exacerbate pain, and provide independent analgesia for specific types of pain (AHCPR, 1994). Antidepressants such as tricyclic antidepressants are useful for neuropathic pain and the analgesic effect usually occurs at lower doses. Anticonvulsants may be useful in patients with neuropathic pain such as lancinating pain (McQuay & Moore, 1997). Adjuvant analgesics should be prescribed by physicians with skill in their titration to achieve effective relief of chronic pain with an underlying neuropathic etiology.

### Optimizing Pain Relief With Opioids

**Recommendation • 30**

Ensure that the timing of analgesics is appropriate according to personal characteristics of the individual, pharmacology (ie. duration of action, peak-effect and half-life) and route of the drug (Grade of Recommendation = B)
**Recommendation • 31**

Recognize that opioids should be administered on a regular time schedule according to the duration of action and depending on the expectation regarding the duration of severe pain. *(Grade of Recommendation = A)*

- If severe pain is expected for 48 hours post-operatively, routine administration may be needed for that period of time. Late in the post-operative course, analgesics may be effective given on an “as needed” basis.
- In chronic cancer pain, opioids are administered on an “around-the-clock” basis, according to their duration of action.
- Long-acting opioids are more appropriate when dose requirements are stable.

**Recommendation • 32**

Use principles of dose titration specific to the type of pain to reach the analgesic dose that relieves pain with a minimum of side effects, according to: *(Grade of Recommendation = B)*

- cause of the pain;
- individual’s response to therapy;
- clinical condition;
- concomitant drug use;
- onset and peak effect;
- duration of the analgesic effect;
- age; and
- known pharmacokinetics and pharmacodynamics of the drugs administered. Doses are usually increased every 24 hours for persons with chronic pain on immediate release preparations, and every 48 hours for persons on controlled release opioids. The exception to this is transdermal fentanyl, which can be adjusted every 3 days.

“We’re seeing a change in how people are talking about pain...and their expectations around pain management”

*(Pilot Implementation Site)*
Recommendation • 33
Promptly treat pain that occurs between regular doses of analgesic (breakthrough pain) using the following principles: *(Grade of Recommendation = C)*

- Breakthrough doses of analgesic in the post-operative situation are dependent on the routine dose of analgesic, the individual’s respiratory rate, and the type of surgery and are usually administered as bolus medications through PCA pumps.
- Breakthrough doses of analgesic should be administered to the person on an “as needed” basis according to the peak effect of the drug (po/pr = q1hr; SC/IM = q30 min; IV = q 10-15 min).
- It is most effective to use the same opioid for breakthrough pain as that being given for “around-the-clock” dosing.
- Individuals with chronic pain should have:
  - An immediate release opioid available for pain (breakthrough pain) that occurs between the regular administration times of the “around-the-clock” medication.
  - Breakthrough doses of analgesic for continuous cancer pain should be calculated as 10-15 per cent of the total 24-hour dose of the routine “around-the-clock” analgesic.
  - Breakthrough analgesic doses should be adjusted when the regular “around-the-clock” medication is increased.
  - Adjustment to the “around-the-clock” dose is necessary if more than 2-3 doses of breakthrough analgesic are required in a 24-hour period, and pain is not controlled.

Recommendation • 34
Use an equianalgesic table to ensure equivalency between analgesics when switching analgesics. Recognize that the safest method when switching from one analgesic to another is to reduce the dose of the new analgesic by one-half in a stable pain situation.

*(Grade of Recommendation = C)*
**Recommendation • 35**

Ensure that alternate routes of administration are prescribed when medications cannot be taken orally, taking into consideration individual preferences and the most efficacious and least invasive route. *(Grade of Recommendation = C)*

- The indications for transdermal routes of medication include allergy to morphine, refractory nausea and vomiting, and difficulty swallowing.
- Consider using continuous subcutaneous infusion of opioids in individuals with cancer who are experiencing refractory nausea and vomiting, inability to swallow, or require this route to avoid continuous peaks and valleys in pain control.
- The cost of medications and the technology necessary for delivery (e.g. pain pumps) should be taken into consideration in selecting certain alternate routes of administration.
- Consider using a butterfly injection system to administer intermittent subcutaneous analgesics.
- Epidural access must be managed by clinicians with appropriate resources and expertise.

**Recommendation • 36**

Recognize the difference between drug addiction, tolerance and dependency to prevent these from becoming barriers to optimal pain relief. *(Grade of Recommendation = A).*

**Discussion of Evidence**

In optimizing pain relief using opioids, the nurse must have a sound understanding of pharmacokinetics and pharmacodynamics in order to ensure that pain is effectively relieved with minimal side effects. The dose of opioid, use of breakthrough opioids, and titrating opioids to effect are important nursing functions in relieving pain, which are implemented in collaboration with physician colleagues.

Pain that is expected to occur as a result of surgery or due to a chronic illness should be anticipated and analgesics administered on a schedule that prevents the person from having to experience pain. Opioid administration that relies on persons in pain or families/caregivers requesting analgesic on an “as needed” basis (prn) produces delays in administration, resulting in periods of inadequate pain control *(AHCPR, 1994).* Periods of inadequate pain control leads to a vicious cycle for persons with chronic pain, in which persons with pain experience decreasing quality of life and declining functional status *(Ferrell, Whedon & Rollins, 1995).*
Inadequate treatment of acute pain can delay recovery for patients after surgery or trauma, and can precipitate a generalized sympathetic response involving the pulmonary and cardiovascular systems (Watt-Watson et al., 1999).

The Canadian Pain Society (1998) notes the key principle in the treatment of all kinds of pain with opioids is dosing to effect or to the point of persistent and unacceptable side effects. In achieving the optimal dose for pain management, titration is used. Titration allows for a steady, consistent increase in opioid dose in the chronic pain population. This method allows the person to adjust to the dose slowly to minimize side effects. Just as the dose is slowly increased, so must the dose be slowly decreased if other treatment modalities have been successful in altering the underlying etiology of the pain, (i.e. radiation to bone metastasis, behavioural therapy in chronic back pain).

Breakthrough pain, or continuous pain that is punctuated by intermittent episodes of acute severe pain, can occur with acute, chronic-malignant and chronic non-malignant pain (Portnoy & Kanner, 1996). This phenomenon is reported by almost two-thirds of those with cancer-related pain. Short acting "rescue" doses to manage breakthrough allows for careful titration of opioids to individualize pain management based on patient response. This concept is essential to handle the common phenomenon of pain that occurs as the baseline level of continuous opioid is being established, when the baseline level is stable but pain occurs with increased activity or when the baseline level is no longer controlling the pain. The use of breakthrough medication allows for prompt relief of acute pain episodes and allows patients more control over their pain.

Providing alternative routes of medication administration to clients unable to tolerate the oral route provides additional options for achieving optimal pain relief. Appendix G provides a sample protocol for subcutaneous injections.

Both meta-analysis and observational studies have noted extremely low incidences of addiction in patients post-operatively and the rarity of this outcome of pain treatment (Choiniere et al., 1989; Porter and Jick, 1980). Nurses need to understand the differences between addiction, tolerance and physical dependence to prevent unfounded judgements from impacting on best pain practice for themselves and their interdisciplinary colleagues and to ensure that they can educate individuals and families appropriately regarding these concerns. Definitions of these terms are included in the glossary of terms, Appendix A.
### Monitoring for Safety and Efficacy

#### Recommendation • 37
Monitor persons taking opioids who are at risk for respiratory depression recognizing that opioids used for people not in pain, or in doses larger than necessary to control the pain, can slow or stop breathing. (*Grade of Recommendation = A*)

- Respiratory depression develops less frequently in individuals who have their opioid doses titrated appropriately. Those who have been taking opioids for a period of time to control chronic or cancer pain are unlikely to develop this symptom.
- The risk of respiratory depression increases with intravenous or epidural administration of opioids, rapid dose escalation, or renal impairment.

#### Recommendation • 38
Monitor persons taking analgesic medications for side effects and toxicity. Recommend a change in opioid if pain relief is inadequate following appropriate dose titration and if the person has side effects refractory to prophylactic treatment such as myoclonus or confusion. Particular caution should be used when administering analgesics to children and the elderly. (*Grade of Recommendation = C*)

#### Recommendation • 39
Evaluate the efficacy of pain relief with analgesics at regular intervals and following a change in dose, route or timing of administration. Advocate for changes in analgesics when inadequate pain relief is observed. (*Grade of Recommendation = C*)

#### Recommendation • 40
Seek referral to a pain specialist for individuals who require increasing doses of opioids that are ineffective in controlling pain. Evaluation should include assessment for residual pathology and other pain causes, such as neuropathic pain. (*Grade of Recommendation = C*)
Discussion of Evidence

Persons with acute pain, particularly children, may be at particular risk for respiratory depression depending on the dose of opioid prescribed and must be monitored according to organizational policies. Tolerance to the respiratory depressant effects of opioids develops quickly when individuals are receiving routine administration of opioids but respiratory depression can occur if doses are escalated rapidly and in large doses. Gradual titration is necessary using principles of titration described in clinical practice guidelines specific to the type of pain. Intravenous or epidural administration of opioids or rapid dose escalation should be managed by skilled practitioners who can anticipate and treat this side effect appropriately (AHCPR, 1992; AHCPR, 1994).

Persons with dose limiting side effects of medications whose pain relief is inadequate may require a change in the opioid. Studies show a change of opioid can be expected to improve symptoms of toxicity in some patients while maintaining pain control. Cherney et al. (1995) prospectively evaluated 100 patients treated by physicians in the selection of opioid medications and routes of administration in the management of inpatients referred to a cancer pain service. Eighty of the 100 patients underwent a total of 182 changes in drug, route, or both before discharge or death. Twenty five per cent of the reason for change of drug was to diminish side effects in the setting of controlled pain and 17 per cent to simultaneously improve pain control and reduce opioid toxicity. Forty-four patients required one or more change in the opioid, and twenty required two or more changes. Therapeutic changes were associated with improvement in physician recorded pain intensity and a lower prevalence of cognitive impairment, hallucination, nausea and vomiting and myoclonus among patients who were discharged from hospital.

In Edmonton, de Stoutz, Bruera and Suarez-Almazor (1995) undertook a retrospective analysis of charts of 191 patients admitted to hospital. Of these, 80 underwent opioid rotation (switching) for cognitive failure, hallucination, myoclonus, nausea/vomiting, local toxicity and persistent pain. These leading symptoms improved in 58 out of 80 patients.

Cancer patients treated with a pain algorithm process for dose adjustment achieved a statistically significant advantage in usual pain levels over time when compared with a control group representing standard pain management practices in the community (Du Pen et al., 1999).
Caution should be taken with children and the elderly as drug interactions occur more frequently. The elderly need careful titration (e.g. smaller doses to start and longer times between doses) because of drug-related accumulation due to age-related changes, for example, reduced glomerular filtration rates (AHCPR, 1992, Doucet et al., 1996).

In children, avoid using the intramuscular route whenever possible. Injections are painful and frightening for children (AHCPR, 1992). Intramuscular injections are not the ideal route for the administration of opioids in children because of variable absorption, a limited number of injection sites and ultimately because children hate receiving them. Fear of injections effects children’s willingness to report pain, which can contribute to undertreatment (Eland & Banner, 1992; Wong, 1995).

The most common reason to change the route of an opioid is the inability of the patient to be able to swallow oral preparations. With persons experiencing malignant pain this is often at end of life. The choice of route needs to take into consideration the setting in which the person receives medication and the comfort level of the individual. The rectal route has become somewhat unacceptable with the advent of transdermal and subcutaneous medication. The use of a subcutaneous butterfly needle, placed by the visiting nurse in the home setting, allows family/care providers to give the medications, reducing nursing visits and giving the patient and family increased independence and control. This system often makes it possible for the person to remain at home (RNAO panel consensus).

Long-acting or continuous release (CR) opioids, whether in oral or transdermal forms, are helpful for people with non-malignant chronic pain. This takes the focus of the person away from the medication and back on improved function, simplifying medication administration in a population returning to work and home activities (RNAO panel consensus).

Long-acting or continuous release (CR) opioids along with short-acting opioids for breakthrough pain may be useful in acute pain, for example after the first 24 hours following major surgery. This combined dosing allows for continuous plasma concentration of opioids plus breakthrough doses for titration for these individuals, particularly with short hospital stays. Where pain is severe and not well-controlled, CR preparations are not suitable (Curtis et al., 1999; Sunshine et al., 1996).
Anticipate and Prevent Common Side Effects of Opioids

**Recommendation • 41**
Anticipate and monitor individuals taking opioids for common side effects such as nausea and vomiting, constipation and drowsiness and institute prophylactic treatment as appropriate. *(Grade of Recommendation = B)*

**Recommendation • 42**
Counsel patients that side effects to opioids can be controlled to ensure adherence with the medication regime. *(Grade of Recommendation = C)*

**Recommendation • 43**
Recognize and treat all potential causes of side effects taking into consideration medications that potentiate opioid side effects: *(Grade of Recommendation = A)*
- sedation - sedatives, tranquilizers, antiemetics;
- postural hypotension - antihypertensives, tricyclics;
- confusion - phenothiazines, tricyclics, antihistamines, and other anticholinergics.

“For our people in particular, because we see them for such long periods of time, we tend to think that this is just that person, that’s the way they react to whatever kind of situation and that may not necessarily be pain. Now we’ve become more focused on that person themselves and the changes in them.” *(Pilot Implementation Site)*
Nausea & Vomiting

Recommendation • 44
Assess all persons taking opioids for the presence of nausea and/or vomiting, paying particular attention to the relationship of the symptom to the timing of analgesic administration.
(Grade of Recommendation = C)

Recommendation • 45
Ensure that persons taking opioid analgesics are prescribed an antiemetic for use on an “as needed” basis with routine administration if nausea/vomiting persists.
(Grade of Recommendation = C)

Recommendation • 46
Recognize that antiemetics have different mechanisms of action and selection of the right antiemetic is based on this understanding and etiology of the symptom.
(Grade of Recommendation = C)

Recommendation • 47
Assess the effect of the antiemetic on a regular basis to determine relief of nausea/vomiting and advocate for further evaluation if the symptom persists in spite of adequate treatment.
(Grade of Recommendation = C)

Recommendation • 48
Consult with physician regarding switching to a different antiemetic if nausea/vomiting is determined to be related to the opioid, and does not improve with adequate doses of antiemetic. (Grade of Recommendation = C)
**Constipation**

**Recommendation • 49**

Institute prophylactic measures for the treatment of constipation unless contraindicated, and monitor constantly for this side-effect.

- Laxatives should be prescribed and increased as needed to achieve the desired effect as a preventative measure for individuals receiving routine administration of opioids.
  
  *(Grade of Recommendation = B)*

- Osmotic laxatives soften stool and promote peristalsis and may be an effective alternative for individuals who find it difficult to manage an increasing volume of pills.
  
  *(Grade of Recommendation = B)*

- Stimulant laxatives may be contraindicated if there is impaction of stool. Enemas and suppositories may be needed to clear the impaction before resuming oral stimulants.
  
  *(Grade of Recommendation = C)*

**Recommendation • 50**

Counsel individuals on dietary adjustments that enhance bowel peristalsis recognizing personal circumstances (seriously ill individuals may not tolerate) and preferences.

*(Grade of Recommendation = C)*

**Recommendation • 51**

Urgently refer persons with refractory constipation accompanied by abdominal pain and/or vomiting to the physician. *(Grade of Recommendation = C)*

**Drowsiness/Sedation**

**Recommendation • 52**

Recognize that transitory sedation is common and counsel the person and family/care provider that drowsiness is common upon initiation of opioid analgesics and with subsequent dosage increases. *(Grade of Recommendation = C)*
Recommendation • 53

Evaluate drowsiness which continues beyond 72 hours to determine the underlying cause, and notify the physician of confusion or hallucinations that accompany drowsiness.

*(Grade of Recommendation = C)*

Discussion of Evidence

Nurses play an important role in the prevention of common side effects such as nausea and vomiting, constipation and drowsiness related to the administration of opioids, which can significantly impact upon the person’s quality of life. Side effects to opioid analgesics can become a barrier to adherence and may be more distressing to individuals than pain. Nurses must anticipate and treat common side effects of opioids, particularly nausea and vomiting and constipation to promote comfort (AHCPR, 1994; Lipman, Jackson & Tyler, 2000). Anticipation and education by the nurse will help to ensure adherence with the medication regimen (SIGN, 2000).

Nausea and vomiting are common and distressing side effects, which may result in an individual abandoning treatment. Tolerance develops for most individuals within 5 – 10 days of initiating therapy and antiemetics can be reduced or withdrawn. A number of medications are recommended as first line treatment for opiate induced nausea and vomiting such as haloperidol (Librach & Squires, 1997) but few of these medications have been investigated in randomized clinical trials. The investigation of chemotherapy-related nausea and vomiting is well researched, but evidence in other types of nausea is mainly descriptive or case studies (Herndon, Jackson & Hallin, 2002; Lipman, Jackson & Tyler, 2000).

Constipation is a painful and distressing side effect of opioid therapy for which tolerance does not develop. When an opioid is initiated, assessment for and treatment of constipation must begin, based on the individual’s normal bowel routine and present circumstances. Exceptions may be made in the immediate post-operative period or in the very last days of life if constipation is not causing distress.
Anticipate and Prevent Procedural Pain

Recommendation • 54
Anticipate pain that may occur during procedures such as medical tests and dressing changes, and combine pharmacologic and non-pharmacologic options for prevention. (Grade of Recommendation = C)

Recommendation • 55
Recognize that analgesics and/or local anaesthetics are the foundation for pharmacological management of painful procedures. Anxiolytics and sedatives are specifically for the reduction of associated anxiety. If used alone, anxiolytics and sedatives blunt behavioural responses without relieving pain. (Grade of Recommendation = C)

Recommendation • 56
Ensure that skilled supervision and appropriate monitoring procedures are instituted when conscious sedation is used. (Grade of Recommendation = C)

Discussion of Evidence
In reviewing the AHCPR (1994) guideline regarding managing procedure related pain, the authors note that much of the data available on the management of procedural related pain comes from studies on children with cancer and addresses non-pharmacological management.

In clinical practice, the accepted standard is that patient’s emotional response to the expected pain of a procedure remains with the patient for subsequent procedures. For procedures that will be repeated, maximize treatment for the pain and anxiety of the first procedure to minimize anxiety before subsequent procedures (RNAO panel consensus).

In many cases, the measures necessary to treat pain require surgical and non-surgical procedures that themselves cause pain. However, repeated noxious stimuli can cause sensitization and changes in the nervous system which may be permanent (Basbaum & Jessell, 2000). The mechanisms by which such procedures lead to pain are similar to those of other causes of pain (neonatal...
heel lancing, surgical procedures with incision of the skin and other tissues, excision of pathological tissues, circumcision, debridement) and all can lead to tissue damage that causes nociceptive pain. In some procedures, iatrogenic nerve damage can result. Many elderly patients will not complain of pain because of the fear of painful diagnostic procedures that may be ordered. The major difference between iatrogenic pain and other types of pain is that procedural pain is anticipated and there is an excellent opportunity to deal with the pain in a planned and timely manner.

Puntillo (1994) found that procedural pain was moderate to severe for ICU cardiovascular patients undergoing chest tube removal (n=35). Pain ratings were not related to analgesia and almost 75 per cent received no analgesics in the hour preceding the procedure.

In the cancer population, especially in the end of life stage, it is important to weigh the expected benefit of the results of the procedure to the traumatic experience which the patient will need to endure. Even the discomfort of lying on a hard table for a CT scan should be considered.

AHCPR (1994) suggests that plans for managing pain associated with painful procedures should address the following questions:

■ Why is the procedure being performed?
■ What is the expected intensity of pain?
■ What is the expected duration of the pain?
■ What is the expected intensity of anxiety?
■ What is the expected duration of anxiety?
■ What reactions do adults predict for themselves?
■ What is the meaning of the procedure for the patient and the family?
■ For children, how do parents think their child will react?

The AHCPR (1994) document goes on to support that the needs of the individual and the type of procedure to be performed will determine the pharmacological approach to managing procedure related pain. Because children and the elderly have special needs, the practitioner’s expertise and experience with special populations is key to successful outcomes.
Patient and Family Education

**Recommendation • 57**
Provide the person and their family/care providers with information about their pain and the measures used to treat it, with particular attention focused on correction of myths and strategies for the prevention and treatment of side effects. *(Grade of Recommendation = A)*

**Recommendation • 58**
Ensure that individuals understand the importance of promptly reporting unrelieved pain, changes in their pain, new sources or types of pain and side effects from analgesics. *(Grade of Recommendation = C)*

**Recommendation • 59**
Clarify the differences between addiction, tolerance, and physical dependence to alleviate misbeliefs that can prevent optimal use of pharmacological methods for pain management. *(Grade of Recommendation = A)*

- Addiction (psychological dependence) is not physical dependence or tolerance and is rare with persons taking opioids for chronic pain.
- Persons using opioids on a chronic basis for pain control can exhibit signs of tolerance requiring upward adjustments of dosage. However, tolerance is usually not a problem and people can be on the same dose for years.
- Persons who no longer need an opioid after long-term use need to reduce their dose slowly over several weeks to prevent withdrawal symptoms because of physical dependence.

**Discussion of Evidence**

Randomized controlled trials have demonstrated that patient and family education by qualified professionals using both written and verbal material have been shown to improve knowledge of pain and reduce concerns regarding tolerance and addiction *(SIGN, 2000)*. Hill, Bird and Johnson *(2001)* conducted a randomized controlled trial to study the effect of patient education on adherence to drug treatment for rheumatoid arthritis. Rhimer et al. *(as cited in AHCPR, 1994)* demonstrated in a randomized clinical trial that patient/family education not only improved patients’ knowledge of pain management but resulted in improved pain relief.
Addiction or psychological dependence is extremely rare with people using opioids for pain, excluding known drug abusers. Addiction is not common with people treated for pain in acute care settings (<0.1%) (Friedman, 1990). In eight controlled trials of patients with chronic non-cancer pain, no addictive behaviour was evident, excluding drug abusers (Portenoy, 1996). With cancer pain, there are numerous studies with short and long-term follow-up with no evidence of addiction.

**Effective Documentation**

**Recommendation • 60**

Document all pharmacological interventions on a systematic pain record that clearly identifies the effect of analgesics on pain relief. Utilize this record to communicate with interdisciplinary colleagues in the titration of analgesics. The date, time, severity, location and type of pain should all be documented. *(Grade of Recommendation = C)*

**Recommendation • 61**

Provide the individual and family in the home setting with a simple strategy for documenting the effect of analgesics. *(Grade of Recommendation = C)*

**Discussion of Evidence**

Documentation of pharmacologic interventions is subject to the policies and procedures of the setting of care. The use of a pain monitoring tool specific to the practice and care setting should be used. A number of observational studies have demonstrated that pain charts used as part of normal practice improve the quality of pain care (Gould et al., 1992; Rawal & Berggren, 1994). The content of the pain chart is more important than the format, with the inclusion of information related to the location, intensity of pain, extent of pain relief, and side effects such as sedation, respiratory rate and common side effects (patients with chronic pain usually do not require ongoing monitoring of respiratory rate and sedation). The graphing of pain levels provides an objective measure of the efficacy of pain management interventions and provides a means of communication among team members. Empowering patients and families to monitor medication use and response provides an opportunity for the person and family in varied settings to be active participants in the management of pain. Samples of documentation tools are provided in Appendix E.
II. NON-PHARMACOLOGICAL MANAGEMENT OF PAIN

**Recommendation • 62**
Combine pharmacological methods with non-pharmacological methods to achieve effective pain management. (*Grade of Recommendation = C*)
- Non-pharmacological methods of treatment should not be used to substitute for adequate pharmacological management.
- The selection of non-pharmacological methods of treatment should be based on individual preference and the goal of treatment.
- Any potential contraindications to non-pharmacological methods should be considered prior to application.

**Recommendation • 63**
Institute specific strategies known to be effective for specific types of pain, such as superficial heat and cold, massage, relaxation, imagery, and pressure or vibration, unless contraindicated. (*Grade of Recommendation = C*)

**Recommendation • 64**
Implement psychosocial interventions that facilitate coping of the individual and family early in the course of treatment. (*Grade of Recommendation = B*)

**Recommendation • 65**
Institute psycho-educational interventions as part of the overall plan of treatment for pain management. (*Grade of Recommendation = A*)

**Recommendation • 66**
Recognize that cognitive-behavioural strategies combined with a multidisciplinary rehabilitative approach are important strategies for treatment of chronic non-malignant pain. (*Grade of Recommendation = A*)
Discussion of Evidence

Most studies of non-pharmacological measures to manage pain are quasi-experimental or observational. Appendix H provides sample procedures for several non-pharmacological strategies for pain control.

There are a few randomized studies examining hypnosis in conjunction with cognitive behavioural techniques aimed at acute procedure-related pain and oral mucositis completed with patients undergoing a bone marrow transplant. Hypnosis and cognitive behavioural treatments show improvement in pain outcomes (Agency for Healthcare Research and Quality, 2001).

In addition, there have been systematic reviews in relaxation and use of sucrose for procedure-based pain in neonates, which demonstrated significant improvement in pain outcomes (Stevens, Yamada & Ohisson, 2001). A number of studies in the use of massage in the treatment of low back pain point to efficacy in using this treatment.

Psycho-educational strategies have been examined in a meta-analysis by Devine & Westlake (1995). This analysis reported significant difference in pain outcomes using psycho-educational techniques. In addition, a meta-analysis conducted by Morley, Eccelston and Williams (1999) of cognitive behavioural therapy for chronic pain in adults, excluding headache, demonstrated improvement in pain and coping.

Appendices – Pain Management
Appendix F – Analgesic Ladder
Appendix G – Sample Subcutaneous Injection Protocol
Appendix H – Non-Pharmacological Methods of Pain Control
## Education Recommendations

### Recommendation • 67
Nurses prepared at the entry to practice level must have knowledge of the principles of pain assessment and management. *(Grade of Recommendation = C)*

All programs preparing nurses for entry to practice must include pain content based on the International Association for the Study of Pain Nursing Curriculum *(IASP, 1993)* and examine both theoretical understanding and clinical competency in managing pain. The ethical and legal implications of not using available strategies to manage pain needs to be emphasized. Strategies for communicating effectively to have the patients’ pain needs met and to resolve conflict and ethical dilemmas in advocating for patients and families must be included *(Ferrell, Whedon & Rollins, 1995)*.

### Recommendation • 68
The principles of pain assessment and management should be included in orientation programs and be made available through professional development opportunities in the organization. *(Grade of Recommendation = C)*

Orientation for all new nursing staff must include basic pain management principles and demonstration of competency in assessment and management skills. Opportunities for clinical case presentations or rounds related to pain are a priority. These educational programs must be updated on an ongoing and regular basis to integrate new knowledge, techniques, and/or technologies *(Ferrell, Whedon & Rollins, 1995)*.

### Recommendation • 69
Educational programs should be designed to facilitate change in nurses’ knowledge, skills, attitudes and beliefs about pain assessment and management in order to ensure support for new practices. *(Grade of Recommendation = C)*

Educational programs that focus on knowledge and skill acquisition alone without examining attitudes and beliefs regarding pain assessment and management will not lead to long term practice changes. Educational strategies to introduce new evidence supporting a change in practice can include educational rounds, interactive workshops and conferences. In addition, reflective practice supported by a clinical mentor is an effective strategy for examining
attitudes, beliefs, and practice behaviours. This type of clinical support also provides opportunities for practitioners to examine how the desired changes in practice will benefit their patients and their own approach to care (Belcher & Sibbald, 1998; Johnson et al., 1994).

**Recommendation • 70**

Educational programs must provide opportunities for the nurse to demonstrate effective practices in pain assessment and management, and must address the resources necessary to support practice (eg. practice modifications, reminder systems, removal of barriers, etc.).

*(Grade of Recommendation = C)*

Formal mentorship and preceptorship opportunities within an organization contribute to the continuing education of nurses in the clinical practice setting. These programs provide opportunities for interactive learning and for the practice of new skills in a supportive environment (Belcher & Sibbald, 1998). In addition, they can act as active strategies for disseminating recommendations for behaviour change. Nursing clinical practice groups/committees, which are clinically led and proactive, may be effective methods of identifying educational needs and the support structures required for implementation.

“It [the assessment tool] has made people more aware of other...ways of treating pain, other than simply over medicating or medicating until the pain stops...It’s really heightened the awareness for clients, for caregivers and for family members as well as staff that there’s more to pain than asking the question, “Do you have pain?”

*(Pilot Implementation Site)*
Organization & Policy Recommendations

Pain can be managed successfully for most people, yet unrelieved pain continues to be problematic for many people. Although guidelines/standards have been widely distributed from respected Societies and Consensus Panels (e.g. AHCPR), pain management continues to be problematic. Patients have a right to the best pain relief possible (Watt-Watson et al., 1999), and organizations have a responsibility to establish supports to facilitate this outcome. The next section outlines essential support structures, adapted from Ferrell, Whedon and Rollins (1995) that are critical in order to change pain management practices.

**Recommendation • 71**

Nursing regulatory bodies should ensure that Standards of Nursing Practice include the adoption of standards for accountability for pain management. *(Grade of Recommendation = C)*

Regulatory bodies need to ensure that standards of nursing practice include the adoption of standards for accountability for pain management. Registration examinations should include pain-related questions as a component of the registration qualifications for all nurses. Requiring pain knowledge as an entry to practice requirement will encourage accountability for pain management.

**Recommendation • 72**

Health care organizations must have documentation systems in place to support and reinforce standardized pain assessment and management approaches. *(Grade of Recommendation = C)*

Admission forms to screen people/patients for problems with pain are required in all health care organizations. Documentation systems that include protocols/flow sheets etc. must be available to facilitate the identification of recommended interventions to manage pain, side effects, and inadequate relief.
Recommendation • 73
Health care organizations must have educational resources available to individuals and families/care providers regarding their participation in achieving adequate pain relief.
(Grade of Recommendation = C)

Patients and families need assistance to know how to communicate pain, what options are available for treatment, and that they have a right to the best pain relief possible. Organizations should develop pain information brochures and supply every hospice, physician’s office, treatment area etc. with these documents in order to facilitate patient/family education.

Recommendation • 74
Health care organizations must demonstrate their commitment to recognizing pain as a priority problem. Policies must clearly support or direct expectations of staff that satisfactory pain relief is a priority. (Grade of Recommendation = C)

The vision or mission statement of the organization, and the patient “bill of rights” should reflect the promise of attentive analgesic care. Patients should be made aware on admission of the staffs’ commitment to attentive analgesic care. Ongoing improvement project teams are required to analyze support systems. Institutions should be connected with expert networks or organizations concerned with adequate pain relief (e.g. Canadian Pain Society, Canadian Palliative Care Society). Research, both nursing and interdisciplinary, must be ongoing to determine effective pain assessment and management strategies.

Accreditation guidelines regarding pain assessment and management should be communicated to all staff. Organizational standards/policies for pain assessment and management (pumps, infusions) must be clearly stated and be evident in practice. Ongoing monitoring through interdisciplinary quality improvement committees and patient surveys is essential. Policies and procedures should be developed within organizations to support the appropriate prescription or ordering of effective pain medications.
### Recommendation • 75

Health care organizations must ensure that resources are available to individuals, family/care providers and staff to provide effective pain assessment and management, such as access to experts in pain management. *(Grade of Recommendation = C)*

Resources that support adequate pain management include appropriate material, financial and human resources. The availability of clinical experts in pain assessment and management is an essential component of pain care. Organizations must have a referral process established that provides access to clinical expertise when consultation is necessary. Such resources must be available across the continuum of care.

### Recommendation • 76

Health care organizations need to demonstrate support for an interdisciplinary approach to pain care. *(Grade of Recommendation = C)*

Pain is a complex, multidimensional problem *(Melzack & Wall, 1996)*; therefore effective management requires a variety of strategies involving all health care disciplines. An interdisciplinary approach is essential. Health professionals need to utilize each other’s expertise in working together to help people with pain. Clinical practice guidelines supporting best practices by health care professionals in pain management will be critical to ensure the approaches to achieve pain relief are adopted.

### Recommendation • 77

Health care organizations must have quality improvement systems in place to monitor the quality of pain management across the continuum of care. *(Grade of Recommendation = C)*

Organizations, through ongoing quality improvement processes such as audit, must ensure that best practice guidelines have been implemented and that continuous quality improvement is a priority.

Continuous Quality Improvement is a critical component in the development of an institutional commitment to pain relief. It is one strategy to facilitate practice change and the continual ongoing improvement of performance in pain assessment and management. It is recommended that systems and mechanisms for Continuous Quality Improvement in pain
management should be established across all systems of care inclusive of community services, hospitals, and long-term care.

The American Pain Society (1995) recommends that quality improvement activities to improve the treatment of acute and cancer pain should include five key elements:

- unrelieved pain should raise a red flag that attracts clinician’s attention;
- making information about analgesics accessible where orders are written;
- promising patients responsive analgesic care and urging them to communicate pain;
- implementing policies and safeguards for the use of modern analgesic technologies; and
- coordinating and assessing implementation of these measures.

**Recommendation • 78**

In planning educational strategies, consider the most effective methods for dissemination and implementation of guideline recommendations. These methods include, but are not limited to: *(Grade of Recommendation = A)*

- the use of a model of behaviour change to guide the development of strategies for implementation.
- the use of a combination of strategies to influence practice change.
- designing implementation strategies that take into consideration the influence of the organizational environment.

It is clear from research done on guideline implementation and the past experiences of the guideline development panel that education alone is not sufficient to ensure that best practices are adopted. Successful adoption of clinical practice guidelines is dependent on many factors and significant attention needs to be focused on the most effective methods for dissemination and implementation. Subsequently, this recommendation is suggested based on empirical evidence, which should be used to guide the implementation process for the best practice guideline Assessment and Management of Pain.

- **Use a model of behaviour change to guide the development of strategies for implementation**

Social science and education research has examined the factors that result in behaviour change. The findings from this research suggest the importance of using a model of behaviour change as a framework to guide the development of strategies to influence practice change. Models of behavioural change that have been proposed as influential in the adopting of clinical
practice guidelines are summarized in Table 1 (Grol, 1997). A commonly used model of behaviour change, entitled the PRECEDE framework suggests the use of predisposing or priming activities to trigger consideration of change, followed by enabling strategies to motivate and facilitate change, and concluding with reinforcing activities to sustain the change (Lomas, 1991).

<table>
<thead>
<tr>
<th>Model</th>
<th>Factors Involved in Promoting Change</th>
</tr>
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<tbody>
<tr>
<td>Educational</td>
<td>Desire for professional competence and continuing professional education</td>
</tr>
<tr>
<td>Epidemiologic</td>
<td>Empirical scientific evidence; evidence-based guidelines</td>
</tr>
<tr>
<td>Marketing</td>
<td>Identified needs are met and advertised broadly through a variety of channels</td>
</tr>
<tr>
<td>Behavioural</td>
<td>Performance review, feedback, reminders, incentives, or sanctions</td>
</tr>
<tr>
<td>Social interaction</td>
<td>Influence of important people, opinion leaders, educational influencers, outreach visits</td>
</tr>
<tr>
<td>Organizational</td>
<td>Communication, support, structure, networks</td>
</tr>
<tr>
<td>Coercive</td>
<td>Laws, regulations, licensing and accreditation, budgeting and contracting</td>
</tr>
</tbody>
</table>

- **Use a combination of strategies to influence practice change**
  Research has demonstrated that many single interventions or combination of interventions work some of the time, but that no one intervention works all of the time (Davis et al., 1995). Traditional didactic continuing education has little impact without enabling or reinforcing strategies. Single-mechanism change strategies that were found to be effective included reminders, patient mediated interventions, outreach visits, opinion leaders and multifaceted activities (Davis et al., 1995). The RNAO “Toolkit: Implementation of clinical practice guidelines” (2002) described in Appendix I provides a detailed discussion of evidence regarding the effectiveness of various implementation strategies.

- **Design implementation strategies that consider the organizational environment**
  Prior to guideline implementation, it is recommended that an analysis be conducted to understand the context within which the structure, process or outcome takes place, to identify barriers to the change process, and to develop a plan linking interventions to any barriers identified (NHS Centre for Reviews and Dissemination, 1999). The “Toolkit: Implementation of clinical practice guidelines” (2002) has a chapter devoted to the assessment of “environmental readiness”. The result of this assessment and analysis of the findings will facilitate the development and implementation of appropriate educational approaches for individual practice settings.
Recommendation • 79

Nursing best practice guidelines can be successfully implemented only where there are adequate planning, resources, organizational and administrative support, as well as the appropriate facilitation. Organizations may wish to develop a plan for implementation that includes:

- An assessment of organizational readiness and barriers to education.
- Involvement of all members (whether in a direct or indirect supportive function) who will contribute to the implementation process.
- Dedication of a qualified individual to provide the support needed for the education and implementation process.
- Ongoing opportunities for discussion and education to reinforce the importance of best practices.
- Opportunities for reflection on personal and organizational experience in implementing guidelines.

In this regard, RNAO (through a panel of nurses, researchers and administrators) has developed the "Toolkit: Implementation of clinical practice guidelines" based on available evidence, theoretical perspectives and consensus. The Toolkit is recommended for guiding the implementation of the RNAO nursing best practice guideline on Assessment and Management of Pain. (Grade of Recommendation = C)

Refer to Appendix I for a description of the Toolkit.

“...I work independently...but we do have our staff meetings and I think it does give you a common language and ...if you have a client move from area to area, which does happen, it’s good because we have some consistency...This was...the idea of the whole thing really...that there would be a consistency.” (Pilot Implementation Site)
**Evaluation & Monitoring**

**Evaluating and monitoring the quality** of pain care can focus on one or all of the three areas of quality conceptualized by Donabedian (1988), namely, structure, process and outcome components depending on the purpose of measurement.

### Structure of Care

Structural performance data include characteristics of health care professionals and organizations such as specialty, training, education, type of facility and ownership (Brennan et al., 1991). Evaluating the structure of pain care might include an examination of the following structure of care indicators:

- Availability and access to physicians and/or nurses identified as pain specialists.
- Qualifications and education of staff in pain assessment.
- Organizational commitment to pain relief inclusive of policies and procedures for pain assessment and management such as standardized tools for pain assessment and daily pain monitoring, and pain adopted as the fifth vital sign in the temperature record.

### Process of Care

Process data describe the activities of the health care provider in the encounter between the patient and the provider such as tests ordered, medications prescribed, assessments completed and interventions implemented. Process data are considered credible if it can be demonstrated that variations in the attribute measured leads to a difference in outcomes (Baker, et al., 1998). Process measures are most useful when they compare factors that can be changed to improve outcomes. The link between the process of care and patient outcomes should be established empirically (Brennan, et al., 1991). Measuring the processes of care provides direction to health care providers in ways that they can improve the quality of care. Although evaluating and monitoring of processes of care are important to all types of pain, the majority of the research in this area has been done in the area of cancer pain. The following discussion reflects this focus.

Standards for cancer pain management have been developed in an attempt to establish criteria for evaluating and monitoring of the quality of cancer pain management. Standards developed in the United States by the American Pain Society (APS, 1995) and the Agency for Health Care Policy (AHCPR, 1994) have been implemented as indicators of quality in a number of organizations to improve accountability for cancer pain treatment and to facilitate system
wide change in the management of pain across health care systems (Bookbinder et al., 1996; Weisman, Griffie, Muchka & Matson, 2000). In Canada, standards for cancer pain management were only recently introduced as part of the criteria for accreditation. Canadian accreditation standards give clear direction to hospitals that ongoing assessment of the effectiveness of pain management is an expected component of the CCHSA evaluation (CCHSA, 1995).

As part of the standards development process, a number of target indicators were developed for evaluating the quality of cancer pain management. These indicators provide criteria for process elements of quality care that should be in place to support appropriate pain management, such as standardized pain documentation and assessment (APS, 1995). In addition, clinical practice guidelines that have evolved from these standards based on high quality empirical evidence may provide the criteria needed in evaluating the observed patterns of care for appropriateness in cancer pain management (AHCPR, 1994).

The evidence-based processes for the management of cancer pain described in clinical practice guidelines, such as this one, may provide the explicit criteria needed in assessing and monitoring to ensure that important processes of care are enacted. Clinical practice guidelines for cancer pain management have been used as a feedback mechanism to improve quality in cancer pain management (Bookbinder, et al., 1996; Hiragi & Nozaki-Taguchi, 2001) and the implementation of pain assessment and management strategies outlined in clinical practice guidelines have been found to have a beneficial impact upon patient outcomes of pain and patient reported levels of satisfaction (Bach, 1995; Bookbinder, et al., 1996; Campese, 1996; Comley & Demeyer, 2001; Hiraga & Nozaki-Taguchi, 2001). A recently conducted randomized clinical trial demonstrated a statistically significant reduction in pain intensity following the implementation of multilevel pain treatment algorithm based on the AHCPR standards (DuPen et al., 1999). A number of observational studies have also demonstrated a positive impact of clinical practice guidelines, which promote appropriate pain treatment on the adequacy of pain treatment and patients’ reported levels of pain relief (Comley & Demeyer, 2001; Hiraga & Nozaki-Taguchi, 2001). Comley and Demeyer (2001) conducted chart audits to evaluate the practice of providers in the appropriate treatment of pain and the impact of implementing a clinical practice guideline on patient satisfaction with pain. Pain intensity ratings, patients self-reported ratings of pain relief and patient satisfaction were used to examine the appropriateness of pain treatment before and after the implementation of the clinical practice guideline. Although findings in the study were not found to be statistically significant, patients reported improved pain relief and less waiting time for analgesics. Rischer and Childress (1996) also reported improvements in the appropriate use of meperidine and in the prescription of regularly scheduled opioids when clinical practice guidelines were implemented.
Substantive statements in this guideline can be used to develop process of care indicators. An example of some of the process indicators that might be useful in evaluating and monitoring the quality of pain care are outlined on page 87.

Evaluating the appropriateness of treatment such as analgesic prescription may be more complex and require the use of specific clinical measures. Such measures have been developed in an attempt to link the type and severity of pain with the appropriate analgesic according to principles of cancer pain management established by the World Health Organization (1986). Four types of measures are reported in the literature for evaluating the appropriateness of cancer pain treatment, namely, the Pain Intensity Scale, Pain Relief Scale, Pain Management Index and a Patient Satisfaction Scale.

Pain Intensity Scales
Measuring the severity of pain using a pain intensity rating scale is the most frequently used tool to assess the severity of pain and to evaluate the effect of treatment modalities. Visual analogue scales, numeric rating scales, and verbal rating scales are frequently used measures in the assessment of pain and its relief. Validity and reliability has been established for these scales (Jensen, Karoly & Braver, 1986; Price, Bush & Long, 1994). Patients are asked to rate the severity of their pain on a scale of 0 indicating no pain to 10, which is described as the worst pain imaginable. The APS (1995) and AHCPR (1994), in order to obtain an indication of adequate pain treatment, identified a cutoff score of 5 or higher on a numeric intensity scale as descriptive of inadequate cancer pain treatment. These scores were chosen because higher scores have been shown to impact significantly on daily functioning (APS, 1995; Cleeland, et al. 1994).

Pain Relief Scale
Estimating the change in pain severity as a result of treatment modalities is also used as a measure for evaluating the adequacy of pain treatment. Patients judge the adequacy of pain treatment by evaluating the level of pain relief as “no change” or “worsening pain” and “complete relief”. Patient scores of no relief or worsening pain are considered indicators of inadequate pain treatment. Pain relief scales have been used in a number of studies to evaluate the effectiveness of pain treatment and to assess if patients were receiving appropriate pain medication (Miasakowski, Nichols, Brody & Synold, 1994; Ward & Gordon, 1994). Validity and reliability of these scales has not been reported in the literature.

Pain Management Indexes
Pain management indexes have been developed to evaluate the appropriateness of cancer pain treatment by assessing congruence between the type of analgesic prescribed and the patients reported level of pain severity using criteria established by the World Health
Organization (WHO, 1986). Three pain management indexes have been described in the literature; (1) Ward’s pain management index (Ward & Gordon, 1994); (2) Zelman’s pain management index (Zelman, Cleeland & Howland, 1987); and, (3) Cleeland’s pain management index (Cleeland et al., 1994). Validity and reliability of the Pain Management Indexes has not been evaluated. In addition, the Pain Management Indexes only evaluate the appropriateness of type of analgesic while doses prescribed may also be inappropriate.

Outcomes of Care
Outcome data refer to the patient’s subsequent health status and may include items such as mortality, quality of life, improvement in symptoms or functional status and patient satisfaction. The use of outcome measures has been criticized for not providing enough information about the source of variation to influence quality improvement; subsequently outcome criteria must be linked to processes of care that can be altered by health care providers to achieve a particular outcome (Baker et al., 1998).

Patient Satisfaction is one of the most frequently used outcome measures for evaluating the quality of pain care. The American Pain Society (1995) recommended the use of a Patient Satisfaction Scale as one of the outcome criteria for evaluating the quality of cancer pain care (APS, 1995). Although, this scale has established validity and reliability, the findings of a number of studies have raised concerns about the appropriateness of patient satisfaction as a measure of the adequacy of cancer pain treatment. Studies have shown that patients report satisfaction with their pain management despite experiencing unacceptably high levels of pain and inappropriate pain (Bookbinder et al., 1996; Lin, 2000; Miaskowski, Nichols, Brody & Synold, 1994; Ward & Gordon, 1994).

It cannot be assumed that patients who are satisfied with their pain management have received appropriate care. Patient satisfaction ratings may not reliably reflect the adequacy of pain treatment but rather the patient’s evaluation of that treatment. Patient satisfaction used as a single indicator in the absence of systematic measurement of the appropriateness of care processes in cancer pain management may lead to false conclusions that cancer pain treatment is adequate. Some examples of outcomes of care that might be evaluated are described on the following page.

Organizations implementing the recommendations in this nursing best practice guideline are advised to consider how the implementation and its impact will be monitored and evaluated. The following table based on the framework outlined in the RNAO Toolkit: Implementation of clinical practice guidelines (2002) summarizes the suggested indicators for monitoring and evaluation:
<table>
<thead>
<tr>
<th><strong>Structure</strong></th>
<th><strong>Process</strong></th>
<th><strong>Outcome</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objectives</strong></td>
<td><strong>To evaluate changes in practice that lead towards improved assessment and management of pain.</strong></td>
<td><strong>To evaluate the impact of implementing the recommendations.</strong></td>
</tr>
<tr>
<td><strong>Organization/Unit</strong></td>
<td><strong>Availability of and access to pain specialists.</strong>&lt;br&gt;<strong>Availability of written resources on pain assessment and management, including practice guidelines.</strong>&lt;br&gt;<strong>Review of best practice guideline recommendations by organizational committee(s) responsible for policies/procedures.</strong>&lt;br&gt;<strong>Pain has been adopted as the fifth vital sign in the client’s health care record.</strong></td>
<td><strong>A standardized tool is used to assess pain.</strong>&lt;br&gt;<strong>Policies and procedures for pain assessment and management are consistent with the BPG.</strong></td>
</tr>
<tr>
<td><strong>Nurse</strong></td>
<td><strong>Availability of educational opportunities re. assessment and management of pain within organization.</strong>&lt;br&gt;<strong>Nursing orientation includes education regarding pain assessment and management.</strong>&lt;br&gt;<strong>Number of nurses attending educational sessions re. assessment and management of pain.</strong></td>
<td><strong>The nurse completes a baseline assessment on persons who report pain.</strong>&lt;br&gt;<strong>The nurse has documented a plan for managing pain.</strong>&lt;br&gt;<strong>The nurse has documented behavioural measures of pain for children and cognitively impaired patients.</strong>&lt;br&gt;<strong>The nurse has completed a comprehensive assessment of pain for patients with chronic pain.</strong>&lt;br&gt;<strong>The nurse has documented the effect of the pain intervention.</strong>&lt;br&gt;<strong>Analgesic orders have been changed for patients with escalating pain.</strong></td>
</tr>
<tr>
<td><strong>Client</strong></td>
<td><strong>Clients at risk for pain have been screened for pain.</strong>&lt;br&gt;<strong>Clients with unrelieved pain were referred to a pain specialist.</strong>&lt;br&gt;<strong>Clients self report their understanding of pain and its management as per a documented education plan.</strong></td>
<td><strong>Improvement in symptoms or functional status.</strong>&lt;br&gt;<strong>Patient satisfaction.</strong>&lt;br&gt;<strong>Patients verbalize an understanding of pain and measures to be used for management.</strong>&lt;br&gt;<strong>Patients demonstrate improvement in quality of life.</strong>&lt;br&gt;<strong>Patients do not experience unrelieved side effects of opioids.</strong></td>
</tr>
<tr>
<td><strong>Financial costs</strong></td>
<td><strong>Provision of adequate financial resources</strong></td>
<td></td>
</tr>
</tbody>
</table>
Process for Update/Review of Guideline

The Registered Nurses Association of Ontario proposes to update this nursing best practice guideline as follows:

1. Following dissemination, each nursing best practice guideline will be reviewed by a team of specialists (Review Team) in the topic area every three years following the last set of revisions.

2. During the three-year period between development and revision, RNAO Nursing Best Practice Guideline project staff will regularly monitor for new systematic reviews, meta-analysis and randomized controlled trials (RCTs) in the field.

3. Based on the results of the monitor, project staff may recommend an earlier revision period. Appropriate consultation with a team of members comprising original panel members and other specialists in the field will help inform the decision to review and revise the best practice guideline earlier than the three year milestone.

4. Three months prior to the three year review milestone, the project staff will commence the planning of the review process as follows:
   a. Invite specialists in the field to participate in the Review Team. The Review Team will be comprised of members from the original panel as well as other recommended specialists.
   b. Compilation of feedback received, questions encountered during the dissemination phase as well as other comments and experiences of implementation sites.
   c. Compilation of new clinical practice guidelines in the field, systematic reviews, meta-analysis papers, technical reviews and randomized controlled trial research.
   d. Detailed work plan with target dates for deliverables will be established.

The revised guideline will undergo dissemination based on established structures and processes.
References


Assessment and Management of Pain


Young, D. N. (1999). Acute pain management research-based protocol. The University of Iowa Gerontological Nursing Interventions Research Centre Research Dissemination Core (RDC).


Bibliography


Milton, C. L. (2000). Contemplating the was, is, and will be. Nursing Science Quarterly, 13(1), 18-23.


## Appendix A – Glossary of Clinical Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acupuncture</strong></td>
<td>The piercing of specific body sites with needles to produce pain relief.</td>
</tr>
<tr>
<td><strong>Addiction</strong></td>
<td>Addiction or psychological dependence refers to the use of opioids to alter mood, i.e. for psychic effect, not for pain. Addiction is characterized by behaviours that include at least one of: impaired control over drug use, compulsive use, continued use despite harm, and craving. Addiction is not common with people treated for pain in acute care settings (&lt;0.1%) (Friedman, 1990).</td>
</tr>
<tr>
<td><strong>Adjuvant analgesic drug</strong></td>
<td>A drug that is not a primary analgesic but that research has shown to have independent or additive analgesic properties.</td>
</tr>
<tr>
<td><strong>Conscious sedation</strong></td>
<td>“Light sedation” during which the patient retains airway reflexes and responses to verbal stimuli.</td>
</tr>
<tr>
<td><strong>Epidural</strong></td>
<td>Situated within the spinal canal, on or outside the dura matter (tough membrane surrounding the spinal cord); synonyms are “extradural” and “peridural”.</td>
</tr>
<tr>
<td><strong>Equianalgesic</strong></td>
<td>Having equal pain-killing effect: morphine sulfate 10 mg parenterally is generally used as the standard for opioid analgesic comparisons.</td>
</tr>
<tr>
<td><strong>Imagery</strong></td>
<td>A cognitive-behavioral strategy that uses mental images as an aid to relaxation.</td>
</tr>
<tr>
<td><strong>Myoclonus</strong></td>
<td>The generalized skeletal muscle jerks often associated with higher doses of opioid medication and may signal a toxic level of opioids (AHCPR, 1994).</td>
</tr>
<tr>
<td><strong>Opioid vs “narcotic” vs “opiate”</strong></td>
<td>OPIOID is the preferred term to use for analgesia as it refers to drugs used for pain management such as morphine, oxycodone, and codeine. “Narcotic” is a term used by media and law enforcement agencies to refer to a wide variety of drugs that have the potential for abuse and illicit street use. Some of these are not analgesics e.g. cocaine. “OPIOID” includes all analgesics, natural and synthetic, and therefore should be used instead of “opiates” which refers only to those analgesics produced from natural poppy alkaloid.</td>
</tr>
</tbody>
</table>
Opioid agonist: Any morphine-like compound that interacts with *mu* receptors to produce analgesia. Although there is no ceiling affect or maximum dose that can be given, dosing may be limited by adverse effects of the opioid. Adverse effects include constipation, nausea and sedation with initial and/or escalating doses, and rarely respiratory depression if titration is inappropriate. While tolerance to nausea and sedation develop within a short time, constipation must always be managed with regular opioid administration.

Opioid antagonist: An opioid antagonist such as naloxone does not produce an analgesic response. It is used for reversing toxic effects of agonists (*excluding meperidine as it potentiates its metabolite normeperidine*) and mixed agonist/antagonists (Hardiman & Limbird, 1996).

Opioid agonist-antagonist: Mixed agonist-antagonist agents such as pentazocine (Talwin) are not recommended for pain management. If administered to opioid-dependent individuals, these agents displace the opioid from the *mu* receptor resulting in withdrawal and pain.

Patient Controlled Analgesia (PCA): Self-administration of analgesics by a patient instructed in doing so; refers to self-dosing usually with intravenous opioid (e.g., morphine) administered by means of a programmable pump but also can refer to oral opioids self-administered in institutions.

Physical dependence: A physiological response that may develop with chronic use of opioids which need to be tapered over several weeks when stopping to avoid withdrawal. Patients taking moderate therapeutic opioid doses generally experience only mild withdrawal when stopping the drug, including insomnia, dysphoria, and flu-like symptoms such as muscle aches, diaphoresis, and nausea. Other common symptoms include agitation, tremors, and tachycardia. Symptoms may last 5-10 days and can be minimized by tapering over several weeks (Kahan et al., 1999).

Relaxation: A state of relative freedom from both anxiety and skeletal muscle tension.
**Titration**: The gradual increase or decrease of medication to reduce or eliminate symptoms while allowing the body to accommodate to drug side effects or toxicity (AHCPR, 1994).

**Tolerance**: Refers to the need for a higher dose of drug to maintain the same effect. Tolerance to the analgesic effects of opioids generally develops slowly and people are often able to stay on the same dose for a long time. Tolerance to non-analgesic effects of opioids usually occurs in days or week such as with nausea and mental clouding. Tolerance to constipation never occurs and prevention must be included with opioid treatment (Kahan et al., 1999).

**TENS**: A method of producing electroanalgesia through electrodes applied to the skin.

**World Health Organization (WHO) Ladder**: A schematic guide for determining the types of analgesic required based on the intensity of pain. Drugs were chosen such that any country in the world could meet the suggested approach (AHCPR, 1994).
# Appendix B – Pain Assessment Tools for Neonates, Infants and Children:

<table>
<thead>
<tr>
<th>Pain Assessment Tool</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLACC</td>
<td>SEE SAMPLE 1</td>
</tr>
<tr>
<td>Children’s Hospital of Eastern Ontario Pain Scale (CHEOPS)</td>
<td>SEE SAMPLE 2</td>
</tr>
<tr>
<td>Wong-Baker Faces Scale</td>
<td>Available online:</td>
</tr>
<tr>
<td></td>
<td>[<a href="http://www.us">http://www.us</a> elsevierhealth.comWOW/faces.html](<a href="http://www.us">http://www.us</a> elsevierhealth.comWOW/faces.html)</td>
</tr>
<tr>
<td></td>
<td>Translations of the Wong-Baker Faces Scale:</td>
</tr>
</tbody>
</table>
SAMPLE 1 – FLACC Scale

<table>
<thead>
<tr>
<th>Categories</th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face</td>
<td>No particular expression</td>
<td>Occasional grimace</td>
<td>Frequent to constant</td>
</tr>
<tr>
<td></td>
<td>or smile, withdrawn,</td>
<td>or frown, withdrawn,</td>
<td>quivering chin,</td>
</tr>
<tr>
<td></td>
<td>disinterested</td>
<td></td>
<td>clenched jaw</td>
</tr>
<tr>
<td>Legs</td>
<td>Normal position</td>
<td>Uneasy, restless,</td>
<td>Kicking, or legs</td>
</tr>
<tr>
<td></td>
<td>or relaxed</td>
<td>tense</td>
<td>drawn up</td>
</tr>
<tr>
<td>Activity</td>
<td>Lying quietly, normal</td>
<td>Squirming, shifting</td>
<td>Arched, rigid or jerking</td>
</tr>
<tr>
<td></td>
<td>position, moves easily</td>
<td>back and forth, tense</td>
<td></td>
</tr>
<tr>
<td>Cry</td>
<td>No cry (awake or asleep)</td>
<td>Moans or whimpers;</td>
<td>Crying steadily,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>occasional complaint</td>
<td>screams or sobs,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>frequent complaints</td>
</tr>
<tr>
<td>Consolability</td>
<td>Content, relaxed</td>
<td>Reassured by occasional</td>
<td>Difficult to console</td>
</tr>
<tr>
<td></td>
<td></td>
<td>touching, hugging or</td>
<td>or comfort</td>
</tr>
<tr>
<td></td>
<td></td>
<td>being talked to, distractible</td>
<td></td>
</tr>
</tbody>
</table>

Each of the five categories (F) Face; (L) Legs; (A) Activity; (C) Cry; (C) Consolability is scored from 0 – 2, which results in a total score between zero and ten.

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### Children’s Hospital of Eastern Ontario Pain Scale (CHEOPS)

<table>
<thead>
<tr>
<th>Item</th>
<th>Behaviour</th>
<th>Score</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cry</strong></td>
<td>No cry</td>
<td>1</td>
<td>Child is not crying</td>
</tr>
<tr>
<td></td>
<td>Moaning</td>
<td>2</td>
<td>Child is moaning or quietly vocalizing, silent cry</td>
</tr>
<tr>
<td></td>
<td>Crying</td>
<td>2</td>
<td>Child is crying but the cry is gentle or whimpering</td>
</tr>
<tr>
<td></td>
<td>Scream</td>
<td>3</td>
<td>Child is in a full-lunged cry; sobbing: may be scored with complaint or without complaint.</td>
</tr>
<tr>
<td><strong>Facial</strong></td>
<td>Composed</td>
<td>1</td>
<td>Neutral facial expression</td>
</tr>
<tr>
<td></td>
<td>Grimace</td>
<td>2</td>
<td>Score only if definite negative facial expression</td>
</tr>
<tr>
<td></td>
<td>Smiling</td>
<td>0</td>
<td>Score only if definite positive facial expression</td>
</tr>
<tr>
<td><strong>Child – verbal</strong></td>
<td>None</td>
<td>1</td>
<td>Child not talking</td>
</tr>
<tr>
<td></td>
<td>Other Complaints</td>
<td>1</td>
<td>Child complains, but not about pain, eg “I want to see my mommy” or “I’m thirsty”</td>
</tr>
<tr>
<td></td>
<td>Pain Complaints</td>
<td>2</td>
<td>Child complains about pain</td>
</tr>
<tr>
<td></td>
<td>Both Complaints</td>
<td>2</td>
<td>Child complains about pain and about other things, eg. “It hurts, I want my mommy”.</td>
</tr>
<tr>
<td></td>
<td>Positive</td>
<td>0</td>
<td>Child makes positive statement or talks about other things without complaint</td>
</tr>
<tr>
<td><strong>Torso</strong></td>
<td>Neutral</td>
<td>1</td>
<td>Body (not limbs) is at rest; torso is inactive</td>
</tr>
<tr>
<td></td>
<td>Shifting</td>
<td>2</td>
<td>Body is in motion in a shifting or serpentine fashion</td>
</tr>
<tr>
<td></td>
<td>Tense</td>
<td>2</td>
<td>Body is arched or rigid</td>
</tr>
<tr>
<td></td>
<td>Shivering</td>
<td>2</td>
<td>Body is shuddering or shaking involuntarily</td>
</tr>
<tr>
<td></td>
<td>Upright</td>
<td>2</td>
<td>Child is in vertical or upright position</td>
</tr>
<tr>
<td></td>
<td>Restrained</td>
<td>2</td>
<td>Body is restrained</td>
</tr>
<tr>
<td><strong>Touch</strong></td>
<td>Not touching</td>
<td>1</td>
<td>Child is not touching or grabbing at wound</td>
</tr>
<tr>
<td></td>
<td>Reach</td>
<td>2</td>
<td>Child is reaching for but not touching wound</td>
</tr>
<tr>
<td></td>
<td>Touch</td>
<td>2</td>
<td>Child is gently touching wound or wound area</td>
</tr>
<tr>
<td></td>
<td>Grab</td>
<td>2</td>
<td>Child is grabbing vigorously at wound</td>
</tr>
<tr>
<td></td>
<td>Restrained</td>
<td>2</td>
<td>Child’s arms are restrained</td>
</tr>
<tr>
<td><strong>Legs</strong></td>
<td>Neutral</td>
<td>1</td>
<td>Legs may be in any position but are relaxed; includes gentle swimming or serpentine-like movements</td>
</tr>
<tr>
<td></td>
<td>Squirming/kicking</td>
<td>2</td>
<td>Definitive uneasy or restless movements in the legs and/or striking out with foot or feet</td>
</tr>
<tr>
<td></td>
<td>Drawn up/ tensed</td>
<td>2</td>
<td>Legs tensed and/or pulled up tightly to body and kept there</td>
</tr>
<tr>
<td></td>
<td>Standing</td>
<td>2</td>
<td>Standing, crouching or kneeling</td>
</tr>
<tr>
<td></td>
<td>Restrained</td>
<td>2</td>
<td>Child’s legs are being held down</td>
</tr>
</tbody>
</table>

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Appendix C - Sample Questions for Baseline Assessment of Pain

Identify Location of Pain
Ask: Where is your pain? Is there more than one site?

Identify PQRST characteristics:
P - provocating and precipitating factors, relieving factors
   Ask:
   ■ What makes your pain worse?
   ■ What makes your pain better?
   ■ What previous treatment have you tried to relieve your pain?
   ■ Were they effective?
Q - quality of pain (eg. burning, stabbing, gnawing, shooting, lancinating)
   Ask:
   ■ What does your pain feel like?
   ■ What words would you use to describe your pain?
R - radiation
   Ask:
   ■ Does the pain move anywhere?
S - severity (use an appropriate intensity scale - see Appendix E)
   Ask:
   ■ On a scale of 0 to 10 with 0 being no pain and 10 being the worst pain you can imagine, how much does it hurt right now?
   ■ How much does it hurt at its worst?
   ■ How much does it hurt at its best?
T - timing
   Ask:
   ■ When did your pain start?
   ■ How often does it occur?
   ■ Has its intensity changed?
   ■ How long does it last?

Identify the effects of pain on function and activities of daily living.
Appendix D – Supplementary Questions for Assessment of Pain

Effect and understanding of current illness
Ask:
- What do you understand about why you are having pain?

Meaning of pain
Ask:
- What concerns do you have about your pain?

Patients typical coping responses to stress and pain
Ask:
- What help do you need to deal with your pain?

Economic effect of the pain and its treatment
Ask:
- Has this pain affected your finances and do you have any concerns about medication costs, etc.?

Distress caused by the pain
Ask:
- How much has this pain impacted on you?
- How much has this pain impacted your relationships with others?
- How much does this pain impact on your usual activities?

Concerns about the use of opioid, anxiolytic or other medications
Ask:
- Do you have any fears or concerns about using opioids or any other medications for pain?

For additional questions, please refer to the Brief Pain Inventory (Appendix E – 8).
APPENDIX E –
Tools for Assessment of Pain in Adults

SAMPLE 1 – Visual Analogue Scale (VAS)
SAMPLE 2 – Numeric Rating Scale (NRS)
SAMPLE 3 – Verbal Scale
SAMPLE 4 - Facial Grimace & Behaviour Flow Charts
SAMPLE 5 - Pain Assessment Tool and Key for Pain Assessment Tool
SAMPLE 6 – Communication Worksheet for Pain Management Orders
SAMPLE 7 – Calgary Interagency Pain Assessment Tool
SAMPLE 8 – Brief Pain Inventory
SAMPLE 1 – Visual Analogue Scale (VAS)

No Pain                        Pain as bad as it could possibly be

The patient indicates intensity of pain on a 10cm. line marked from no pain at one end to pain as bad as it could possibly be at the other end.

SAMPLE 2 – Numeric Rating Scale (NRS)

0  1  2  3  4  5  6  7  8  9  10

The patient rates pain on a scale from 0 to 10.

SAMPLE 3 – Verbal Rating Scale (VRS)

No Pain  Mild Pain  Moderate Pain  Severe Pain  Very Severe Pain  Worst Possible Pain

The patient rates the pain on a Likert scale verbally, e.g. “none”, “mild pain”, ”moderate pain”, “severe pain”, “very severe pain” or “worst possible pain”.

Nursing Best Practice Guideline
**SAMPLE 4 - Facial Grimace & Behaviour Checklist Flow Charts**

Name: ___________________________  Active ☐  Resting ☐  Time: ____________

- 0 = no pain
- 2 = mild discomfort
- 4 = distressing
- 6 = horrible
- 8 = excruciating

Regular pain Medication: ___________________________  Rescue/PRN medication ____________

Month:

<table>
<thead>
<tr>
<th>Date or Time</th>
<th>08</th>
<th>10</th>
<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
<th>20</th>
<th>22</th>
<th>24</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACIAL SCORE</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>12</td>
<td>14</td>
<td>16</td>
</tr>
</tbody>
</table>

Facial Grimace Score: The facial grimace scale scores the level of pain (from 0-10 on the left) as assessed by the caregiver observing the facial expressions of the resident. Assessment is done once daily or more (14 days are indicated above). This assessment of the degree of discomfort should be done at the same time every day and during the same level of activity. **Note if rescue/PRN medication is given; yes (y), no (n) or dose.**

**Behaviour Checklist**

<table>
<thead>
<tr>
<th>10 = always</th>
<th>8 = mostly</th>
<th>6 = often</th>
<th>4 = occasionally</th>
<th>2 = rarely</th>
<th>0 = never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date or Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BEHAVIOUR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>eats poorly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tense</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>quiet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>indicates pain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>calls out</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>paces</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>noisy breathing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sleeps poorly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>picks</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

PRN medication

Behaviour Checklist: Behaviour changes can be used to assess pain or distress, and thereby evaluate the efficacy of interventions. At the top of the scoring graph, when the specific behaviour has been observed, it can be rated from 10 (always) to 0 (never). The behaviours being rated and scored over 24 hours are listed down the left column. This chart scores 9 different behaviours over 14 days. The caregiver can expand on the checklist, i.e., rocking, screams, etc. **Note if rescue/PRN medication given. Both tools may be adapted for individual use.**

(The Facial Grimace & Behaviour Checklist are used with permission from Saint Joseph's Health Centre, Sarnia. Palliative Care Research Team.)

SAMPLE 5 - Pain Assessment Tool

Assessment Date: ____________________ Name:______________________________________________

Location of Pain: Use letters to identify different pains.

(Introduced by: Nancy A. Bauer, Hon BA, B. Comm, RN, CETN)

Intensity: Use appropriate pain tool to rate pain subjectively/objectively on a scale of 0-10.

<table>
<thead>
<tr>
<th>Location</th>
<th>Pain A</th>
<th>Pain B</th>
<th>Pain C</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is your/their present level of pain?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What makes the pain better?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is the rate when the pain is at its least?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What makes the pain worse?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is the rate when the pain is at its worst?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the pain continuous or intermittent (come &amp; go)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When did this pain start?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What do you think is the cause of this pain?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What level of pain are you satisfied with?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Quality: Indicate the words that describe the pain using the letter of the pain (A,B,C) being described.

Aching □ throbbing □ shooting □ stabbing □ gnawing □ sharp □
burning □ tender □ exhausting □ tiring □ penetrating □ numb □
nagging □ hammering □ miserable □ unbearable □ tingling □ stretching □
pulling □ other:__________________________

Originally adapted with permission from Grey Bruce Palliative Care/Hospice Association Manual.
SAMPLE 5 – Pain Assessment Tool (cont)

<table>
<thead>
<tr>
<th>Effects of pain on activities of daily living</th>
<th>yes</th>
<th>no</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>sleep and rest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>social activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>appetite</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>physical activity and mobility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>emotions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sexuality/intimacy</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Effects of Pain on your Quality of Life: (happiness, contentment, fulfillment)**
What can’t you do that you would like to do or what activity would improve the resident’s quality of life?

**Current Medications and Usage:**

**Family Support:**

**Symptoms:**
What other symptoms are you/they experiencing?
- constipation
- nausea
- vomiting
- fatigue
- insomnia
- depression
- short of breath
- sore mouth
- weakness
- drowsy
- other

**Behaviours:**
What behaviours are you/they experiencing?
- calling out
- restless
- resistant to movement
- not eating
- pacing
- not sleeping
- withdrawn
- noisy breathing
- rocking
- other

Have you experienced a significant degree of pain in the past? How did you manage that pain?

Is there anything else you can tell us that will enable us to work with you in managing your pain?

**Nursing Pain Diagnosis:**
- nociceptive
- visceral
- neuropathic
- suffering
- incident pain
- somatic
- muscle spasm
- raised intracranial pressure

**Problem List:** (add to resident care plan)
1. __________________ 2. __________________ 3. __________________ 4. __________________

Signature: ________________________________ Date: ____________________

SAMPLE 5 – Key for Pain Assessment Tool

Key for Pain Assessment Tool

Location of Pain:
As indicated, have the resident, or if necessary, you can place the letter “A” on the part of the body where the resident reports feeling pain. If the pain starts at a certain point then travels, you can indicate the direction and extent of the travel with an arrow. If it seems that there could be a second or third pain, then use the letters “B” and “C”.

Intensity:
The resident will be requested to answer the questions in the table as they relate to each identified pain. The preferred pain tool is 0-10. If the resident is finding this confusing or is unable to comply, then use the facial grimace scale as an objective measure.

Quality:
Go over each pain location to identify the appropriate descriptors from the list or if the resident has a different descriptive word, record this beside “other”. Indicate the letter that corresponds to the location of pain being described beside the descriptive words.

Effects of pain on activities of daily living (ADL’s):
You want to find out if any of the pains identified in the “location of pain” and “intensity” section are affecting any of the activities of daily living listed. Tick “yes” or “no”. If pain is causing a problem in any of the ADL’s, indicate in the comments column which pain is causing the problem and in what way. If pain were not causing a problem in the activity but the resident expresses a difficulty because of some other problem or symptom, you would tick no, but include a comment to elaborate. It is also important to know if the resident feels that help is needed with any of the activities identified as a problem or if they are content to live with it. If the resident wants help, this would then suggest a need to refer to the appropriate person.

The following are some additional questions and/or points that you may find helpful when asking about the specific ADL areas. Also, included are possible *referrals to the professional(s), who are experts in the different areas.

SAMPLE 5 – Key for Pain Assessment Tool (cont)

1. Sleep and Rest:
   Ask - How often do you wake in the night? How many nights of the week? What is a good or bad night?
   What position do you sleep in? Do you use any special positioning devices?
   Have you tried any in the past? Did they work?

2. Social activities:
   Includes leisure (hobbies), recreational activities, shopping.
   *OT/SW/Volunteers.

3. Appetite:
   Number and size of meals taken. Food preferences, snacks, an example of how each might help.
   *Dietitian

4. Physical activity and mobility:
   Moving in bed; transfers to bed, chair, toilet; stairs; walking; other exercise; sports; personal care; bathing,
   dressing, grooming, eating; medication management.
   *OT/RN

5. Emotions:
   Any change, as a result of the pain, and if so, is this significantly interfering with activities so that
   intervention would be helpful.
   *SW/PC/Volunteer

6. Sexuality and intimacy:
   Is the pain resulting in a significant reduction in desire for sexuality/intimacy or making
   the physical movement required too painful? In both cases, is this a concern for the resident?
   *SW/PT/OT/RN/DR

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SAMPLE 5 – Key for Pain Assessment Tool (cont)

Effects of pain on your quality of life:
This can be a very difficult subject to try to describe, which is why some descriptors have been included to assist the resident: happiness, contentment and fulfillment. Have the resident indicate which activity can no longer be done that is important to him/her. Ask how we can help.

Current Medications and Usage:
Include all medications and how ordered; dose, times, number of tablets, how effective using 0-10 scale, regular or PRN, side effects.

Family Support:
This can be any person who is involved in the resident’s life and is recognized by the resident as a “significant other”.

Symptoms:
Have the resident identify from the listed symptoms which ones are affecting his/her quality of life.
Check appropriate ones.

Behaviours:
Have the resident identify disturbing behaviours if possible and/or the assessor will identify and check exhibited behaviour(s).

Past pains:
Have the resident describe the pain incident and his/her coping methods.

Nursing pain diagnosis:
Considering all the information from the assessment, identify one or more pains.
Assign the corresponding letter to relate them to the pains identified in the “Location of Pain” section.

SAMPLE 5 – Key for Pain Assessment Tool (cont)

Pain Diagnosis:
There are four classifications of pain; nociceptive pain, neuropathic pain, mixed pain and pain of unknown origin.

1. Nociceptive:
Nociceptive pain is caused by tissue damage created by pressure, infiltration or destruction by an identifiable somatic or visceral lesion.

Visceral:
Constant, dull, aching, poorly localized pain that has a gradual onset often felt at a distance from the origin.
   a) Solid Viscera (eg: liver, pancreas)
      - if intense, can be sharp and penetrating
   b) Hollow Viscera (eg: bowel, bladder)
      - diffuse, or colicky pain
      - feeling of pressure or fullness caused by blockage of previously open “tunnel”
      - may have shortness of breath or cough with thoracic viscera; abdominal distention, nausea, vomiting with abdominal viscera.

Somatic:
Constant gnawing or aching, usually well localized, worse on movement or weight-bearing if in pelvis, hips, femur, joints or spine.
   - bony metastases
   - skin invasion or ulceration
   - muscle invasion, soft tissue masses
   - pathologic fractures
   - osteo-arthritis and other bone destructive diseases
   - may be present in back and shoulder if it involves T1

Raised intracranial pressure:
   - brain tumours
   - meningeal carcinomatosis


Illustrated by: Nancy A. Bauer, Hon BA, B. Comm, RN, CETN
2. Neuropathic:
   Neuropathic pain is caused by pressure, invasion or destruction of peripheral or central nervous tissues, which leads to complex and abnormal spinal cord or thalamic neural processes that produce sustained pain.
   - invasion, destruction of lumbosacral or brachial plexus
   - spinal cord compression
   - pain often precedes sensory and motor loss
   - constant ache to intermittent, sharp stabbing pain
   - specific nerve root compression may cause dermatomal pain
   - progressive damage may result in superficial burning pain
   - can experience hyperaesthesia, dysexiaesthesia, progressive motor and sensory loss
   - can have vasomotor changes

3. Mixed:
   Mixed pain in many instances is a combination of nociceptive and neuropathic pain.
   - tumour invasion of pancreas with spread to and destruction of vertebra including spinal cord compression.

4. Unknown:
   Persistent pain, the cause of which cannot be determined by history and investigations.
   - may be described with all the current word descriptors
   - patient is often not believed if investigations are inconclusive
   - is usually under treated
   - can be debilitating
   - lifelong suffering may lead to depression

Problem List:
Using the “Pain Assessment Tool” circle the pain diagnosis(es) and list them on the care plan. If you identify a problem that the resident did not, it is important to ensure the resident agrees and understands why this is a problem. This is an ongoing list. Please date each problem when identified and resolved.

Goals and Plans:
From the problem list, the resident creates goals and you work together to identify the interventions. It is important to include who specifically will do what and to whom the resident has been referred. Also, include what outcome measure you will be using to re-evaluate the goal i.e. analog scale of 0 -10 and what tool you will use if it is other than pain. i.e. 0 = no nausea, 10=worst nausea imaginable; or scores from the behaviour checklist. Include when you anticipate the plans to be carried out and when you will be re-evaluating the goal.

Make sure to sign and date each entry.

SAMPLE 6 – Communication Worksheet for Pain Management Orders

Pain Assessment for: ____________________________  Physician: ____________________________

Pain Diagnosis: ____________________________  Date: ____________________________

Location of Pain(s): ____________________________

Check the descriptor:

- aching
- throbbing
- shooting
- stabbing
- sharp
- burning
- gnawing
- dull
- tingling
- tender

Resident’s behaviour:

- calling out
- restless
- resistant to movement
- not eating
- pacing
- rocking
- not sleeping
- withdrawn

Intensity (0-10) circle the pain number: none 0  1  2  3  4  5  6  7  8  9  10 worst

Pattern: continuous  intermittent  new pain  old pain

If a new pain, how long has it been present? ____________________________

What makes it better? ____________________________ worse? ____________________________

Impact on ADL’s: ____________________________  Family support? ____________________________

Resident’s perception of what is causing the pain: ____________________________

Resident’s goal for pain control: (numerical score) _________  (activity) ____________________________

Drug, dosage and total number of doses of all analgesic medications in the past 24 hours:
(i.e. PRN, breakthrough and routine) (i.e. Tylenol #3®, Morphine [immediate release], MS contin® [long acting].)

Drug, dosage and total number of doses of all adjuvant analgesic medications in the past 24 hours:
(i.e. PRN, breakthrough and routine) (i.e. Naproxin®, Elavil®, Ativan®, Gravol®, Tylenol® plain)

Non-pharmacological interventions tried in the past: ____________________________

Suggestions for changes in management:
New meds/dosages/intervals ____________________________, discontinue: ____________________________

Orders: ____________________________


Naprosyn is a registered trademark of Syntex, Elavil is a registered trademark of Merck Frosst, Ativan is a registered trademark of Wyeth-Ayerst, Gravol is a registered trademark of Horner, Tylenol is a registered trademark of McNeil Consumer Products.
SAMPLE 7 – Calgary Interagency Pain Assessment Tool

PART I – PATIENT REPORT

1. Please mark the area of pain on the drawing. If you have more than one pain, label them A, B, C, etc.

2. How would you rate your overall pain? (Scale used: 0–10 scale)

   no pain          severe pain

   0  1  2  3  4  5  6  7  8  9  10

   at present time          at its least          at its worst          acceptable

3. How and when did your pain begin?

4. Check the words that best describe the kind of pain you have.

   - Dull ache
   - Pins & needles
   - Burning
   - Sharp
   - Stabbing
   - Internal
   - Cramping
   - Throbbing
   - External
   - Other (describe below)

5. How long does the pain usually last?

   - Seconds
   - Minutes
   - Hours
   - Constant

6. What makes the pain worse?

   - Walking
   - Moving
   - Eating
   - Other (describe below)

7. Is your pain worse at a particular time of day? When?

8. What makes the pain better?

   - Heat/cold
   - Distraction
   - Massage
   - Lying still
   - Relaxation
   - Changing position
   - Medication
   - Other (describe below)

9. What pain medications are you presently taking?

10. What medications have helped to control your pain?

11. What medications have not helped?

12. Has the pain or treatment produced any other effects?

   - Nausea
   - Drowsiness
   - Unclear thinking
   - Constipation
   - Dizziness
   - Diarrhea
   - Anxiety
   - Changes in mood
   - Disturbed sleep
   - Loss of appetite
   - Other (describe below)

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SAMPLE 7 – Calgary Interagency Pain Assessment Tool (cont)

PART II – PATIENT ASSESSMENT (Please incorporate this data into the patient/family care plan)

Assess how the pain affects the patient’s life. (eg. finances, job, family relationships)

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

Assess how the pain affects the patient’s daily activities. (eg. bathing, activity, sleeping, eating, walking)

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

Other information relevant to this pain problem.
(eg. objective assessment, affect, guarding, grimacing, vital signs)

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

Date __________________________ Signature __________________________

PART III – DISCHARGE OR REFERRAL

Complete discharge summary including:
- Pain history
- Course of treatment
- Relevant pain consultation

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

Date __________________________ Signature __________________________

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SAMPLE 8 – Brief Pain Inventory (BPI)

The Brief Pain Inventory is available in a short version (acute care/emergency departments) and a long version (persistent or chronic pain). The short form is included here as an example.

The Brief Pain Inventory has been validated in at least 7 different languages by examining the consistency of its two-factor structure (factors: severity of pain and impact of pain).

- Chinese
- Filipino
- French
- German
- Greek
- Hindi
- Italian
- Japanese
- Spanish
- Taiwanese
- Vietnamese

Validation studies are underway for versions translated into other languages. For more information, copies of the Brief Pain Inventory (long and short versions) and references for translated versions of this tool, visit: http://www.mdanderson.org/departments/PRG/
SAMPLE 8 – Brief Pain Inventory (BPI)

1. Throughout our lives, most of us have had pain from time to time (such as minor headaches, sprains, and toothaches). Have you had pain other than these everyday kinds of pain today?
   1. Yes
   2. No

2. On the diagram, shade in the areas where you feel pain. Put an X on the area that hurts the most.

3. Please rate your pain by circling the one number that best describes your pain at its worst in the last 24 hours.

No Pain

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pain as bad as you can imagine</td>
</tr>
</tbody>
</table>

4. Please rate your pain by circling the one number that best describes your pain at its least in the last 24 hours.

No Pain

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pain as bad as you can imagine</td>
</tr>
</tbody>
</table>

5. Please rate your pain by circling the one number that best describes your pain on the average.

No Pain

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pain as bad as you can imagine</td>
</tr>
</tbody>
</table>

6. Please rate your pain by circling the one number that tells how much pain you have right now.

No Pain

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<td>Pain as bad as you can imagine</td>
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</tbody>
</table>

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**SAMPLE 8 – Brief Pain Inventory (BPI)**

7. What treatments or medications are you receiving for your pain?

---

8. In the last 24 hours, how much relief have pain treatments or medications provided? Please circle the one percentage that most shows how much relief you have received:

<table>
<thead>
<tr>
<th>0%</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
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<tbody>
<tr>
<td>No Relief</td>
<td>Complete Relief</td>
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9. Circle the one number that describes how, during the past 24 hours, pain has interfered with your:

**A. General Activity**

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<td>Does not Interfere</td>
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**B. Mood**

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**C. Walking Ability**

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**D. Normal Work (includes both work outside the home and housework)**

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**E. Relations with other people**

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**F. Sleep**

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**G. Enjoyment of life**

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Appendix F – The Analgesic Ladder

World Health Organization Analgesic Ladder

Reprinted with permission of the World Health Organization.

USE OF THE WHO ANALGESIC LADDER

The WHO analgesic ladder is intended to be a guideline in structuring the use of analgesia in the pharmacological management of pain, and is not intended to be a rigid framework. The WHO approach to pain control may need to be combined with other treatment modalities. Evaluate the type and intensity of the pain, and then match the drug to the pain intensity and other characteristics.

The use of analgesia should start at the step of the analgesic ladder appropriate for the severity of pain. It is not necessary to initiate therapy at Step 1 if the person is experiencing moderate to severe pain, patients with severe pain should have therapy initiated at Step 3.

The use of the ladder is reversed in situations of acute pain, starting at Step 3 and moving to Step 1 analgesics as recovery occurs.
This figure shows a simple plan for acute pain management, which is an adaptation of the WHO Analgesic Ladder. As acute pain decreases, weaker analgesics are used.

**Step 1**
Non-opioid

**Step 2**
Opioid for mild to moderate pain + Non-opioid

**Step 3**
Strong opioid ± Non-opioid

Acute pain: pain decreases or goes away

Appendix G – Sample Subcutaneous Injection Protocol

Reprinted with permission. This procedure was developed for St. Joseph’s Health Care London and should be used for reference only. Each organization is unique. Policy development must be done considering legislation, mission, vision, values, and unique features of each organization.

Procedure: Subcutaneous Infusion by “butterfly” needle, Insertion of

Purpose: To decrease the necessity for multi-site injections for medication administration.

Equipment: Winged infusion butterfly set – 25 gauge, pediatric short
Alcohol swab
5 cm x 7.5 cm (approx) occlusive dressing
0.9% sodium chloride, 1 ml in 22 or 25 gauge, 3cc syringe

Procedure:
1. Explain procedure to the patient and family.
2. Wash your hands.
3. Using sterile technique, prime the winged infusion set with the 0.9% sodium chloride.
4. Gently pinch the patient’s skin at the chosen injection/insertion site to form a bulge. Common sites are subclavicular on the anterior chest, on the abdomen, above or below the waist. Arms and thighs can be used, but care must be given cautiously to prevent unintended needle stick injuries to caregivers.
5. Swab the site with alcohol swab.
6. With the bevel of the needle down, insert the entire length of the needle at a 45-degree angle.
7. Apply occlusive dressing over the insertion site.
8. Label the dressing with date, time of insertion and your initials.
9. Ensure the cap (injection cap/hub) is securely on the end of the tubing (extension).
Site Changes: Assess the site regularly. Indications for site change include:

- Area is red and hard/puffy (there will be some puffiness after medication administration, but this should absorb quickly, within 30 minutes).
- Patient complaints of pain at the site after medication has been absorbed (there may be some stinging for the first few doses of medication)
- Leaking or bleeding at the site.

Documentation: Record date, time and site of insertion/removal of winged infusion set in patient’s health record.

Administration: To administer medication through the “butterfly” (ISI Intermittent Sub-cutaneous Injection):

1. Prepare prescribed medication, ordered subcutaneously, in syringe.
2. Draw up 0.2 ml 0.9% sodium chloride in a second syringe.
3. Remove the cap from the winged infusion set.
4. Remove needle from syringe with medication and attach syringe to winged infusion set. Inject the prescribed medication.
5. Similarly, attach the syringe with the 0.2 ml sodium chloride and flush the tubing.
6. Swab the cap with alcohol, and replace on the infusion set.
7. Document as you would for any injection, per your organizational policy.

This system does not require flushing when not in use. Flushing is only required immediately after injecting medication to clear the medication from the tubing and needle for the patient to receive the full dose. This also lets the next nurse know that the tubing contains only saline, and no medication. Different medications can then be given using the same injection/infusion site.

The volume of fluid per injection should not exceed 2 ml. to allow for timely absorption of medication and to reduce discomfort for the patient.

This system can be used for continuous subcutaneous infusion (CSI) using a computerized portable pump, a syringe driver delivery system, a positive pressure infuser or similar system.
Appendix H – Non-Pharmacological Methods of Pain Control

Heat & Cold
Heat and cold have been used for centuries as a treatment for pain. There are at least four reasons why a nurse should advocate for a trial of heat or cold:
- it works well for some patients.
- it works quickly.
- adverse effects are virtually non-existent.
- it can provide some patients/families with an important sense of control over the relief of pain.

Rationale for treatment:
Well-controlled research is lacking, however the premise is that applying heat to skin will increase blood flow and reduce neurotransmitters, which sensitize pain nerve fibres. Heat may compete for nerve transmission with pain and therefore, in the brain there is a perception of heat and a reduced perception of pain.

Cold works through a similar pathway as heat, competing for nerve transmission. It creates numbness in the area of pain and may be especially helpful when the pain has a burning quality.

Nursing Role:
Assess for prior use of heat or cold. Remember that some patients may think that you are “trivializing“ their pain. You need to be able to describe the scientific rationale to encourage patients with even severe pain on large doses of medication to try heat or cold as an adjunct to their pain management. Heat and cold can be used in children older than six months of age.
Contraindications:

Avoid use of heat in following situations:
- any area that is bleeding.
- any area with decreased feeling.
- any injury within the first 24 hours.
- if the person is using any menthol-containing products (Vicks, Ben Gay etc.).
- within a site of radiation therapy while receiving radiation - may use on this area five days after completing treatment, provided that the skin is not flaky, red or tender.

Avoid use of cold in the following situations:
- any area with poor circulation (diabetic feet).
- within a site of radiation therapy while receiving radiation – may use on this area five days after completing treatment, provided that the skin is not flaky, red or tender.
- on a wound in the healing phase.

Application of Heat or Cold:
- Heat can be obtained from a variety of sources including heating pad, hot water bottle, topical ointment.
- Use low to medium setting to avoid burns.
- Placement is usually over painful site. When this is not possible (too painful, open wound) other options include:
  - above the site.
  - below the site.
  - on the opposite side of the body (e.g. pain on right hip, place on left hip).
- Prevent direct contact with heat/cold source on the skin.
- Heating pad placed on a child should be monitored every five minutes and the child should not be left unattended.
- Cold can be enhanced by using it in conjunction with menthol-containing products (eg. A535® with ice bag over top).
- When using a topical ointment, test the skin with a small amount of product to check for allergic reaction prior to using it on the painful site.

Relaxation & Imagery
Relaxation may be appropriate for almost any type of pain with a goal of reducing muscle tension and anxiety. It may also be used in children of 7 years and older. Patients who are already tense and in pain may benefit from simple relaxation centred on slow, deep breathing. Progressive muscle relaxation in which the patient uses isometric exercise to systematically relax muscles from head to foot may also be helpful.

Lengthy relaxation techniques are enhanced by a quiet environment and having the patient in a comfortable, well supported position. Listening to a taped relaxation session may help the patient to focus more easily, and become less distracted by their pain.

Children over 5 years old can usually participate in guided imagery. Imagination is spontaneous and natural for children. They are able to focus easily, thus taking their attention away from their pain. However, caution should be used in using relaxation and imagery techniques in patients who are either:

- Confused.
- Drowsy.
- Have a poor grasp of the language of the relaxation therapist.
- Have a previous history of significant psychiatric history, such as having hallucinations.

Distraction
Distraction is another pain reducing technique used in children. The idea is to divert the child’s attention by actively involving him in the performance of a distracting task that is interesting and more pleasant than the painful procedure. He can choose anything of interest such as blowing bubbles, a special book, a musical toy, a magical wand (Kleiber et al., 1999).

Other Therapies
Recognize that complementary therapies such as therapeutic touch, massage, reflexology, Reiki and aromatherapy may be useful non-pharmacological adjuncts to pain management. These modalities should be administered by individuals with training in their application.

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Appendix I - Description of the Toolkit

Toolkit: Implementation of clinical practice guidelines

Best practice guidelines can only be successfully implemented if there are adequate planning, resources, organizational and administrative support as well as appropriate facilitation. In this light, RNAO, through a panel of nurses, researchers and administrators has developed a “Toolkit: Implementation of Clinical Practice Guidelines” based on available evidence, theoretical perspectives and consensus. The Toolkit is recommended for guiding the implementation of any clinical practice guideline in a health care organization.

The “Toolkit” provides step-by-step directions to individuals and groups involved in planning, coordinating, and facilitating the guideline implementation. Specifically, the “Toolkit” addresses the following key steps.

1. Identifying a well-developed, evidence-based clinical practice guideline.
2. Identification, assessment and engagement of stakeholders.
3. Assessment of environmental readiness for guideline implementation.
4. Identifying and planning evidence-based implementation strategies.
5. Planning and implementing evaluation.
6. Identifying and securing required resources for implementation.

Implementing guidelines in practice that result in successful practice changes and positive clinical impact is a complex undertaking. The “Toolkit” is one key resource for managing this process.

The “Toolkit” is available through the Registered Nurses Association of Ontario. The document is available in a bound format for a nominal fee, and is also available free of charge off the RNAO website. For more information, an order form or to download the “Toolkit”, please visit the RNAO website at www.rnao.org.
## Appendix J – Summary of Practice Recommendations

### ASSESSMENT

<table>
<thead>
<tr>
<th>RECOMMENDATION</th>
<th>GRADE</th>
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<tr>
<td><strong>Screening for Pain</strong></td>
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</table>
| 1. Screen all persons at risk for pain at least once a day by asking the person or family/care provider about the presence of pain, ache or discomfort.  
   - For children, consider the following:  
     - Ask parents the words a child might use to describe pain or observe the child for signs/behaviours indicative of pain.  
     - Screen for pain when undertaking other routine assessments.  
   - For the frail elderly, non-verbal or non-cognizant person, screen to assess if the following markers are present:  
     - states he/she has pain;  
     - experiences change in condition;  
     - diagnosed with chronic painful disease;  
     - has history of chronic unexpressed pain;  
     - taking pain-related medication for >72 hours;  
     - has distress related behaviours or facial grimace;  
     - indicates that pain is present through family/staff/volunteer observation. | C |

| **Parameters of Pain Assessment** | |
| 2. Self-report is the primary source of assessment for verbal, cognitively intact persons. Family/care provider reports of pain are included for children and adults unable to give self-report. | C |
| 3. A systematic, validated pain assessment tool is selected to assess the parameters of pain, which include:  
   - location of pain;  
   - effect of pain on function and activities of daily living (ie. work, interference with usual activities, etc.);  
   - level of pain at rest and during activity;  
   - medication usage;  
   - P - provoking or precipitating factors;  
   - Q - quality of pain (what words does the person use to describe pain? - aching, throbbing);  
   - R - radiation of pain (does the pain extend from the site?);  
   - S - severity of pain (intensity, 0-10 scale); and  
   - T - timing (occasional, intermittent, constant). | C |
### Nursing Best Practice Guideline

<table>
<thead>
<tr>
<th>Parameters of Pain Assessment (cont.)</th>
<th>RECOMMENDATION</th>
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| 4.                                  | A standardized tool with established validity is used to assess the intensity of pain.  
- Visual Analogue Scale (VAS);  
- Numeric Rating Scale (NRS);  
- Verbal Scale;  
- Faces Scale;  
- Behavioural Scale. | C       |
| 5.                                  | Pain assessment also includes physiological and behavioural indicators of pain, and should be included in populations such as infants, children, the cognitively impaired and in persons with acute pain. | C       |

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<thead>
<tr>
<th>Comprehensive Pain Assessment</th>
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| 6.                          | The following parameters are part of a comprehensive pain assessment:  
- physical examination, relevant laboratory and diagnostic tests;  
- effect and understanding of current illness;  
- meaning of pain and distress caused by the pain;  
- coping responses to stress and pain;  
- effects on activities of daily living (especially in the frail elderly and non-cognizant person);  
- psychosocial and spiritual effects;  
- psychological - social variables (anxiety, depression);  
- situational factors – culture, language, ethnic factors, economic effects of pain and treatment;  
- person’s preferences and expectations/beliefs/myths about pain management methods; and  
- person’s preferences and response to receiving information related to his/her condition and pain. | C       |

<table>
<thead>
<tr>
<th>Reassessment and Ongoing Assessment of Pain</th>
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| 7.                                          | Pain is reassessed on a regular basis according to the type and intensity of pain and the treatment plan.  
- Pain is reassessed at each new report of pain and new procedure, when intensity increases, and when pain is not relieved by previously effective strategies.  
- Pain is reassessed after the intervention has reached peak effect (15-30 minutes after parenteral drug therapy, 1 hour after immediate release analgesic, 4 hours after sustained release analgesic or transdermal patch, 30 minutes after non-pharmacological intervention).  
- Acute post-operative pain should be regularly assessed as determined by the operation and severity of pain, with each new report of pain or instance of unexpected pain, and after each analgesic, according to peak effect time. | C       |
### Reassessment and Ongoing Assessment of Pain (cont.)

8. The following parameters are included in the regular re-assessment of pain:

- current pain intensity, quality and location;
- intensity of pain at its worst in past 24 hours, at rest and on movement;
- extent of pain relief achieved – response (reduction on pain intensity scale);
- barriers to implementing the treatment plan;
- effects of pain on ADL’s, sleep and mood;
- side effects of medications for pain treatment (nausea, constipation);
- level of sedation; and
- strategies used to relieve pain, for example:
  - Analgesic doses taken regularly and for breakthrough pain
  - Non-pharmacological interventions:
    - Physical modalities
    - Cognitive/behavioural strategies
    - Rehabilitative strategies
    - Environmental changes
    - Reduction in anxiety.

9. Unexpected intense pain, particularly if sudden or associated with altered vital signs such as hypotension, tachycardia, or fever, should be immediately evaluated.

10. Document on a standardized form that captures the person’s pain experience specific to the population and setting of care. Documentation tools will include:

- Initial assessment, comprehensive assessment and re-assessment.
- Monitoring tools that track efficacy of intervention (0-10 scale).

11. Document pain assessment regularly and routinely on standardized forms that are accessible to all clinicians involved in care.

12. Teach individuals and families (as proxy recorders) to document pain assessment on the appropriate tools when care is provided. This will facilitate their contributions to the treatment plan, and will promote continuity of effective pain management across all settings.

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**Recommendaion**

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<td>Teach individuals and families (as proxy recorders) to document pain assessment on the appropriate tools when care is provided. This will facilitate their contributions to the treatment plan, and will promote continuity of effective pain management across all settings.</td>
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**GRADE OF RECOMMENDATION**
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<tr>
<td>Communicating Findings of a Pain Assessment</td>
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<tr>
<td>13. Validate with persons/care providers that the findings of the pain assessment (health care provider’s and person’s/care provider’s) reflect the individual’s experience of pain.</td>
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<td>14. Communicate to members of the interdisciplinary team pain assessment findings by describing parameters of pain obtained through the use of a structured assessment tool, the relief or lack of relief obtained from treatment methods, person’s goals for pain treatment and the effect of pain on the person.</td>
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| 15. Advocate on behalf of the person for changes to the treatment plan if pain is not being relieved. The nurse will engage in discussion with the interdisciplinary health care team regarding identified need for change in the treatment plan. The nurse supports his/her recommendations with appropriate evidence, providing a clear rationale for the need for change, including:  
  - intensity of pain using a validated scale;  
  - change in severity pain scores in last 24 hours;  
  - change in severity and quality of pain following administration of analgesic and length of time analgesic is effective;  
  - amount of regular and breakthrough pain medication taken in last 24 hours;  
  - person’s goals for pain relief;  
  - effect of unrelieved pain on the person;  
  - absence/presence of side effects or toxicity; and  
  - suggestions for specific changes to the treatment plan that are supported by evidence. | C     |
| 16. Provide instruction to the person/care provider on:  
  - the use of a pain log or diary (provide a tool).  
  - communicating unrelieved pain to their physician and supporting them in advocating on their own behalf. | C     |
| 17. Report situations of unrelieved pain as an ethical responsibility using all appropriate channels of communication in the organization, including individual/care provider documentation. | C     |
| 18. Refer persons with chronic pain whose pain is not relieved after following standard principles of pain management to:  
  - a specialist skilled in dealing with the particular type of pain;  
  - a multidisciplinary team to address the complex emotional, psycho/social, spiritual and concomitant medical factors involved. | C     |
### Pharmacological Management of Pain

| RECOMMENDATION                                                                                                                                  | *GRADE
|-------------------------------------------------------------------------------------------------------------------------------------------------|------
| **Selecting appropriate analgesics**                                                                                                             | A    |
| 21. Ensure that the selection of analgesics is individualized to the person, taking into account:                                                 |      |
| - the type of pain (acute or chronic, nociceptive and/or neuropathic);                                                                      |      |
| - intensity of pain;                                                                                                                          |      |
| - potential for analgesic toxicity (age, renal impairment, peptic ulcer disease, thrombocytopenia);                                             |      |
| - general condition of the person;                                                                                                          |      |
| - concurrent medical conditions;                                                                                                            |      |
| - response to prior or present medications;                                                                                                  |      |
| - cost to the person and family; and                                                                                                         |      |
| - the setting of care.                                                                                                                         |      |
| 22. Advocate for use of the simplest analgesic dosage schedules and least invasive pain management modalities:                                | C    |
| - The oral route is the preferred route for chronic pain and for acute pain as healing occurs.                                                |      |
| - Tailor the route to the individual pain situation and the care setting.                                                                     |      |
| - Intravenous administration is the parenteral route of choice after major surgery, usually via bolus and continuous infusion.                |      |
| - The intramuscular route is not recommended for adults or infants/children because it is painful and not reliable.                           | B    |

*GRADE OF RECOMMENDATION*
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<tr>
<th>RECOMMENDATION</th>
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<tr>
<td>Selecting appropriate analgesics (cont.)</td>
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</table>
| 23. Use a step-wise approach in making recommendations for the selection of analgesics which are appropriate to match the intensity of pain:  
- The use of the WHO Analgesic Ladder is recommended for the treatment of chronic cancer pain.  
- Pharmacological management of mild to moderate postoperative pain begins with acetaminophen or NSAIDS. However, moderate to severe pain should be treated initially with an opioid analgesic. | B |
| 24. Advocate for consultation with a pain management expert for complex pain situations which include, but are not limited to:  
- pain unresponsive to standard treatment;  
- multiple sources of pain;  
- mix of neuropathic and nociceptive pain; and  
- history of substance abuse. | C |
| 25. Recognize that acetaminophen or non-steroidal, anti-inflammatory drugs (NSAIDS) are used for the treatment of mild pain and for specific types of pain as adjuvant analgesics unless contraindicated. | A |
| 26. Recognize that adjuvant drugs are important adjuncts in the treatment of specific types of pain.  
- Adjuvant drugs such as anticonvulsants and antidepressants provide independent analgesia for specific types of pain.  
- Extra caution is needed in administering antidepressant and anticonvulsant drugs to the elderly who may experience significant anticholinergic and sedative side effects. | B |
| 27. Recognize that opioids are used for the treatment of moderate to severe pain, unless contraindicated, taking into consideration:  
- previous dose of analgesics;  
- prior opioid history;  
- frequency of administration;  
- route of administration;  
- incidence and severity of side effects; and  
- potential for age related adverse effects; and  
- renal function. | A |
Selecting appropriate analgesics (cont.)

28. Consider the following pharmacological principles in the use of opioids for the treatment of severe pain:
   - Mixed agonist-antagonists (eg. pentazocine) are not administered with opioids because the combination may precipitate a withdrawal syndrome and increase pain.
   - The elderly generally receive greater peak and longer duration of action from analgesics than younger individuals, thus dosing should be initiated at lower doses and increased more slowly ("careful titration").
   - Special precautions are needed in the use of opioids with neonates and infants under the age of six months. Drug doses, including those for local anaesthetics, should be calculated carefully based on the current or most appropriate weight of the neonate. Initial doses should not exceed maximum recommended amounts.

29. Recognize that meperidine is contraindicated for the treatment of chronic pain.
   - Meperidine is not recommended for the treatment of chronic pain due to the build-up of the toxic metabolite normeperidine, which can cause seizures and dysphoria.
   - Meperidine may be used in acute pain situations for very brief courses in otherwise healthy individuals who have not demonstrated an unusual reaction (ie. local histamine release at the infusion site) or allergic response to other opioids such as morphine or hydromorphone.
   - Meperidine is contraindicated in patients with impaired renal function.

Optimizing Pain Relief with Opioids

30. Ensure that the timing of analgesics is appropriate according to personal characteristics of the individual, pharmacology (ie. duration of action, peak-effect and half-life) and route of the drug.

31. Recognize that opioids should be administered on a regular time schedule according to the duration of action and depending on the expectation regarding the duration of severe pain.
   - If severe pain is expected for 48 hours post-operatively, routine administration may be needed for that period of time. Late in the post-operative course, analgesics may be effective given on an “as needed” basis.
   - In chronic cancer pain, opioids are administered on an “around-the-clock” basis, according to their duration of action.
   - Long-acting opioids are more appropriate when dose requirements are stable.
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<th>RECOMMENDATION</th>
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<tr>
<td>Optimizing Pain Relief with Opioids (cont.)</td>
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</table>
| 32. Use principles of dose titration specific to the type of pain to reach the analgesic dose that relieves pain with a minimum of side effects, according to:  
  - cause of the pain;  
  - individual's response to therapy;  
  - clinical condition;  
  - concomitant drug use;  
  - onset and peak effect;  
  - duration of the analgesic effect;  
  - age; and  
  - known pharmacokinetics and pharmacodynamics of the drugs administered. Doses are usually increased every 24 hours for persons with chronic pain on immediate release preparations, and every 48 hours for persons on controlled release opioids. The exception to this is transdermal fentanyl, which can be adjusted every 3 days. | B |
| 33. Promptly treat pain that occurs between regular doses of analgesic (breakthrough pain) using the following principles:  
  - Breakthrough doses of analgesic in the post-operative situation are dependent on the routine dose of analgesic, the individual's respiratory rate, and the type of surgery, and are usually administered as bolus medications through PCA pumps.  
  - Breakthrough doses of analgesic should be administered to the person on an “as needed” basis according to the peak effect of the drug (po/pr = q1h; SC/IM = q 30 min; IV = q 10-15 min).  
  - It is most effective to use the same opioid for breakthrough pain as that being given for “around-the-clock” dosing.  
  - Individuals with chronic pain should have:  
    - An immediate release opioid available for pain (breakthrough pain) that occurs between the regular administration times of the “around-the-clock” medication.  
    - Breakthrough doses of analgesic for continuous cancer pain should be calculated as 10-15 per cent of the total 24-hour dose of the routine “around-the-clock” analgesic.  
    - Breakthrough analgesic doses should be adjusted when the regular “around-the-clock” medication is increased.  
    - Adjustment to the “around-the-clock” dose is necessary if more than 2-3 doses of breakthrough analgesic are required in a 24-hour period, and pain is not controlled. | C |
| 34. Use an equianalgesic table to ensure equivalency between analgesics when switching analgesics. Recognize that the safest method when switching from one analgesic to another is to reduce the dose of the new analgesic by one-half in a stable pain situation. | C |
### Optimizing Pain Relief with Opioids (cont.)

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</table>
| 35. Ensure that alternate routes of administration are prescribed when medications cannot be taken orally, taking into consideration individual preferences and the most efficacious and least invasive route.  
- The indications for transdermal routes of medication include allergy to morphine, refractory nausea and vomiting, and difficulty swallowing.  
- Consider using continuous subcutaneous infusion of opioids in individuals with cancer who are experiencing refractory nausea and vomiting, inability to swallow, or require this route to avoid continuous peaks and valleys in pain control.  
- The cost of medications and the technology necessary for delivery (e.g. pain pumps) should be taken into consideration in selecting certain alternative routes of administration.  
- Consider using a butterfly injection system to administer intermittent subcutaneous analgesics.  
- Epidural access must be managed by clinicians with appropriate resources and expertise. | C |

### Monitoring for safety and efficacy

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<tr>
<th>RECOMMENDATION</th>
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<tr>
<td>36. Recognize the difference between drug addiction, tolerance and dependency to prevent these from becoming barriers to optimal pain relief.</td>
<td>A</td>
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</tbody>
</table>
| 37. Monitor persons taking opioids who are at risk for respiratory depression recognizing that opioids used for people not in pain, or in doses larger than necessary to control the pain, can slow or stop breathing.  
- Respiratory depression develops less frequently in individuals who have their opioid doses titrated appropriately. Those who have been taking opioids for a period of time to control chronic or cancer pain are unlikely to develop this symptom.  
- The risk of respiratory depression increases with intravenous or epidural administration of opioids, rapid dose escalation, or renal impairment. | A |
<p>| 38. Monitor persons taking analgesic medications for side effects and toxicity. Recommend a change in opioid if pain relief is inadequate following appropriate dose titration and if the person has side effects refractory to prophylactic treatment such as myoclonus or confusion. Particular caution should be used when administering analgesics to children and the elderly. | C |
| 39. Evaluate the efficacy of pain relief with analgesics at regular intervals and following a change in dose, route or timing of administration. Advocate for changes in analgesics when inadequate pain relief is observed. | C |</p>
<table>
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<tr>
<th>RECOMMENDATION</th>
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<tbody>
<tr>
<td>40. Seek referral to a pain specialist for individuals who require increasing</td>
<td>C</td>
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<tr>
<td>doses of opioids that are ineffective in controlling pain. Evaluation should</td>
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<tr>
<td>include assessment for residual pathology and other pain causes, such as</td>
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<tr>
<td>neuropathic pain.</td>
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<tr>
<td>41. Anticipate and monitor individuals taking opioids for common side</td>
<td>B</td>
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<tr>
<td>effects such as nausea and vomiting, constipation and drowsiness, and</td>
<td></td>
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<tr>
<td>institute prophylactic treatment as appropriate.</td>
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<tr>
<td>42. Counsel patients that side effects to opioids can be controlled to</td>
<td>C</td>
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<tr>
<td>ensure adherence with the medication regime.</td>
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<tr>
<td>43. Recognize and treat all potential causes of side effects taking into</td>
<td>A</td>
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<tr>
<td>consideration medications that potentiate opioid side effects:</td>
<td></td>
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<tr>
<td>- sedation – sedatives, tranquillizers, antiemetics;</td>
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<tr>
<td>- postural hypotension – antihypertensives, tricyclics;</td>
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<td>- confusion – phenothiazines, tricyclics, antihistamines and other</td>
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<tr>
<td>anticholinergics.</td>
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<tr>
<td>44. Assess all persons taking opioids for the presence of nausea and/or</td>
<td>C</td>
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<tr>
<td>vomiting, paying particular attention to the relationship of the symptom</td>
<td></td>
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<tr>
<td>to the timing of analgesic administration.</td>
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<tr>
<td>45. Ensure that persons taking opioid analgesics are prescribed an antiemetic</td>
<td>C</td>
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<tr>
<td>for use on an “as needed” basis with routine administration if nausea/vomiting</td>
<td></td>
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<tr>
<td>persists.</td>
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<tr>
<td>46. Recognize that antiemetics have different mechanisms of action and</td>
<td>C</td>
</tr>
<tr>
<td>selection of the right antiemetic is based on this understanding and</td>
<td></td>
</tr>
<tr>
<td>etiology of the symptom.</td>
<td></td>
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<tr>
<td>47. Assess the effect of the antiemetic on a regular basis to determine</td>
<td>C</td>
</tr>
<tr>
<td>relief of nausea/vomiting and advocate for further evaluation if the symptom</td>
<td></td>
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<tr>
<td>persists in spite of adequate treatment.</td>
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<tr>
<td>48. Consult with physician regarding switching to a different antiemetic</td>
<td>C</td>
</tr>
<tr>
<td>if nausea/vomiting is determined to be related to the opioid, and</td>
<td></td>
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<tr>
<td>does not improve with adequate doses of antiemetic.</td>
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Assessment and Management of Pain

<table>
<thead>
<tr>
<th>RECOMMENDATION</th>
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<tbody>
<tr>
<td><strong>Constipation</strong></td>
<td></td>
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<tr>
<td>49. Institute prophylactic measures for the treatment of constipation unless contraindicated, and monitor constantly for this side-effect.</td>
<td>B/C</td>
</tr>
<tr>
<td>■ Laxatives should be prescribed and increased as needed to achieve the desired effect as a preventative measure for individuals receiving routine administration of opioids.</td>
<td></td>
</tr>
<tr>
<td>■ Osmotic laxatives soften stool and promote peristalsis and may be an effective alternative for individuals who find it difficult to manage an increasing volume of pills.</td>
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<tr>
<td>■ Stimulant laxatives may be contraindicated if there is impaction of stool. Enemas and suppositories may be needed to clear the impaction before resuming oral stimulants.</td>
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</tr>
<tr>
<td>50. Counsel individuals on dietary adjustments that enhance bowel peristalsis recognizing personal circumstances (seriously ill individuals may not tolerate) and preferences.</td>
<td>C</td>
</tr>
<tr>
<td>51. Urgently refer persons with refractory constipation accompanied by abdominal pain and/or vomiting to the physician.</td>
<td>C</td>
</tr>
<tr>
<td><strong>Drowsiness/Sedation</strong></td>
<td></td>
</tr>
<tr>
<td>52. Recognize that transitory sedation is common and counsel the person and family/care provider that drowsiness is common upon initiation of opioid analgesics and with subsequent dosage increases.</td>
<td>C</td>
</tr>
<tr>
<td>53. Evaluate drowsiness which continues beyond 72 hours to determine the underlying cause and notify the physician of confusion or hallucinations that accompany drowsiness.</td>
<td>C</td>
</tr>
<tr>
<td><strong>Anticipate and prevent procedural pain</strong></td>
<td></td>
</tr>
<tr>
<td>54. Anticipate pain that may occur during procedures such as medical tests and dressing changes, and combine pharmacologic and non-pharmacologic options for prevention.</td>
<td>C</td>
</tr>
<tr>
<td>55. Recognize that analgesics and/or local anaesthetics are the foundation for pharmacological management of painful procedures. Anxiolytics and sedatives are specifically for the reduction of associated anxiety. If used alone, anxiolytics and sedatives blunt behavioural responses without relieving pain.</td>
<td>C</td>
</tr>
<tr>
<td>56. Ensure that skilled supervision and appropriate monitoring procedures are instituted when conscious sedation is used.</td>
<td>C</td>
</tr>
<tr>
<td>RECOMMENDATION</td>
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<td>----------------------------------------------------</td>
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<tr>
<td><strong>Patient and family education</strong></td>
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<tr>
<td>57. Provide the person and their family/care providers with information about their pain and the measures used to treat it, with particular attention focused on correction of myths and strategies for the prevention and treatment of side effects.</td>
<td>A</td>
</tr>
<tr>
<td>58. Ensure that individuals understand the importance of promptly reporting unrelieved pain, changes in their pain, new sources or types of pain and side effects from analgesics.</td>
<td>C</td>
</tr>
<tr>
<td>59. Clarify the differences between addiction, tolerance, and physical dependence to alleviate misbeliefs that can prevent optimal use of pharmacological methods for pain management.</td>
<td>A</td>
</tr>
<tr>
<td>▪ Addiction (psychological dependence) is not physical dependence or tolerance and is rare with persons taking opioids for chronic pain.</td>
<td></td>
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<tr>
<td>▪ Persons using opioids on a chronic basis for pain control can exhibit signs of tolerance requiring upward adjustments of dosage. However, tolerance is usually not a problem and people can be on the same dose for years.</td>
<td></td>
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<tr>
<td>▪ Persons who no longer need an opioid after long-term use need to reduce their dose slowly over several weeks to prevent withdrawal symptoms because of physical dependence.</td>
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<tr>
<td><strong>Effective documentation</strong></td>
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<tr>
<td>60. Document all pharmacological interventions on a systematic pain record that clearly identifies the effect of analgesic on pain relief. Utilize this record to communicate with interdisciplinary colleagues in the titration of analgesic. The date, time, severity, location and type of pain should all be documented.</td>
<td>C</td>
</tr>
<tr>
<td>61. Provide the individual and family in the home setting with a simple strategy for documenting the effect of analgesics.</td>
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**RECOMMENDATION**

### Non-Pharmacological Management of Pain

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| 62. Combine pharmacological methods with non-pharmacological methods to achieve effective pain management.  
  - Non-pharmacological methods of treatment should not be used to substitute for adequate pharmacological management.  
  - The selection of non-pharmacological methods of treatment should be based on individual preference and the goal of treatment.  
  - Any potential contraindications to non-pharmacological methods should be considered prior to application. | C |
| 63. Institute specific strategies known to be effective for specific types of pain, such as superficial heat and cold, massage, relaxation, imagery, and pressure or vibration, unless contraindicated. | C |
| 64. Implement psychosocial interventions that facilitate coping of the individual and family early in the course of treatment. | B |
| 65. Institute psycho-educational interventions as part of the overall plan of treatment for pain management. | A |
| 66. Recognize that cognitive-behavioural strategies combined with a multidisciplinary rehabilitative approach are important strategies for treatment of chronic non-malignant pain. | A |
Notes:
Pain continues to be a challenge to effectively manage, and remains a priority goal for patient care. A heightened awareness of pain management issues in nursing practice is evident. Initiatives that have contributed to this increased awareness include, but are not limited to: National Pain Awareness Week, the inclusion of pain indicators in the Canadian Council of Health Service Accreditation Standards, a revised nursing education curriculum from the International Association for the Study of Pain (www.iasp-pain.org), and standards of care from the Canadian Pain Society.

A review of the most recent literature and pain guidelines published over the last 3-4 years does not suggest dramatic changes to our approach to pain management, but rather suggest some refinements and stronger evidence for our approach.
Revision Process
The Registered Nurses’ Association of Ontario (RNAO) has made a commitment to ensure that this practice guideline is based on the best available evidence. In order to meet this commitment, a monitoring and revision process has been established for each guideline every 3 years. The revision panel members (experts from a variety of practice settings) are given a mandate to review the guideline focusing on the recommendations and the original scope of the guideline.

Members of the panel critically appraised seven international guidelines on the topic of pain assessment and management, using the Appraisal of Guidelines for Research and Evaluation (AGREE, 2001) Instrument. From this review, two guidelines were identified to inform the revision process. These guidelines were:


**Definitions**
Throughout this supplement, the term “chronic pain” has been updated to “persistent pain” and “side effects” is now referred to as “adverse effects” in order to reflect current terminology.

**Summary of Evidence**
The following content reflects the evidence reviewed that either supports the original guideline recommendations, or provides evidence for revision. Through the review process, no recommendations were deleted. However, several recommendations were combined, and a number were re-worded for clarity or to reflect new knowledge. As a result, the numbering of the recommendations has been modified.

### Practice Recommendations

#### Practice Recommendations Part A: Assessment – Screening for Pain

1. **Screen all persons at risk for pain at least once a day (when undertaking other routine assessments), by asking the person or family/care provider about the presence of pain, ache or discomfort. In situations where the individual is non-verbal, use behavioural indicators to identify the presence of pain.**

   **Grade of Recommendation = C**

   The wording of this recommendation has been changed to emphasize the need for screening to occur during other routine assessments, or during the provision of care, for all clients. Pain is endorsed nationally and internationally as the 5th vital sign (Davis & Walsh, 2004) and screening all clients for pain supports this approach. A focus on screening through the use of behavioural indicators in the non-verbal client is also emphasized.

   Additional literature supports:
   - APS, 2005; Bird, 2003; Brown, 2004; Cavender et al., 2004; Davis & Walsh, 2004; ICSI, 2006; Malviya et al., 2006; Van Dijk et al., 2001; Van Dijk et al., 2002; Voepel-Lewis et al., 2002.

#### Practice Recommendations Part A: Assessment – Parameters of Pain Assessment

2. **Self-report is the primary source of assessment for verbal, cognitively intact persons. Family/care provider reports of pain are included for children and adults unable to give self-report.**

   **Grade of Recommendation = C**

   Additional literature supports:
   - Bird, 2003; Brown, 2004; Cavender et al., 2004; Kaasalainen & Crook, 2003; Kleiber et al., 2001; Malviya et al., 2006; Van Dijk et al., 2001; Van Dijk et al., 2002; Voepel-Lewis et al., 2002

3. **A systematic, validated pain assessment tool is selected to assess the following basic parameters of pain:**

   **Grade of Recommendation = C**

   - location of pain;
   - effect of pain on function and activities of daily living (i.e., work, interference with usual activities, etc.);
   - level of pain at rest and during activity;
   - medication usage and adverse effects;
   - provoking or precipitating factors;
   - quality of pain (what words does the person use to describe pain? - aching, throbbing);
   - radiation of pain (does the pain extend from the site?);
   - severity of pain (intensity, 0-10 scale), pain related symptoms; and timing (occasion, intermittent, constant).

   The wording of this recommendation has been changed. Basic parameters for pain assessment continue to be important and supported by the literature, but there are various methods of approaching the assessment of the parameters of pain, other than PQRST. Additional parameters of pain assessment have been added to ensure that the recommendation is comprehensive. These include, for example, adverse effects related to medication use and any pain related symptoms experienced by the individual. Refer to the additions to Appendix C (pg. 21 of this supplement) for examples of additional mnemonics that can be used to approach a basic pain assessment.

   Additional literature supports:
   - Bird, 2003; Brown, 2004; Kleiber et al., 2001; Van Dijk et al., 2002; Voepel-Lewis et al., 2002
4. A standardized tool with established validity is used to assess the intensity of pain.  

- Visual Analogue Scale (VAS);  
- Numeric Rating Scale (NRS);  
- Verbal Scale;  
- Faces Scale;  
- Behavioural Scale.  

![Grade of Recommendation = A]

The Grade of Recommendation has been changed to A from C, based on the research evidence that supports the use of a validated tool for the assessment of pain.

The selection of an appropriate pain assessment tool is based on its suitability of use with the patient population (Bird, 2003). Please note that there have been some revisions to the tools included in the appendices that support this recommendation – refer to Appendix B in this supplement (pg. 21) for a summary of additional assessment tools for the pediatric population.

**Additional literature supports:**
Bird, 2003; Brown, 2004; Cavender et al., 2004; Jensen et al., 2002; Kleiber et al., 2001; Krulewitch et al., 2000; Malviya et al., 2005; Van Dijk et al., 2001; Van Dijk et al., 2002; Voepel-Lewis et al., 2002

5. Pain assessment in patient populations who are unable to give self-report (non-communicative) may include behavioural indicators using standardized measures and physiological indicators where appropriate.  

![Grade of Recommendation = C]

The wording of this recommendation has been changed to reflect a focus on the use of standardized behavioural indicators in the assessment of pain in non-communicative patients, supplemented by physiological indicators when appropriate. Refer to Appendix E in this supplement (pg. 22) for an example of a tool to support assessment of behavioural indicators in non-verbal adults.

**Additional literature supports:**
Bird, 2003; Brown, 2004; Cavender et al., 2004; Feldt, 2000; KaasaLahen & Cook 2003; Kleiber et al., 2001; Krulewitch et al., 2000; Malviya et al., 2006; Van Dijk et al., 2001; Van Dijk et al., 2002; Voepel-Lewis et al., 2002

### Practice Recommendations Part A: Assessment – Comprehensive Pain Assessment

6. The following parameters are part of a comprehensive pain assessment:  
- physical examination, relevant laboratory and diagnostic data;  
- effect and understanding of current illness;  
- history of pain;  
- meaning of pain and distress caused by the pain (current and previous);  
- coping responses to stress and pain;  
- effects on activities of daily living;  
- psychosocial and spiritual effects;  
- psychological - social variables (anxiety, depression);  
- situational factors – culture, language, ethnic factors, economic effects of pain and treatment;  
- person's preferences and expectations/beliefs/myths about pain management methods; and  
- person's preferences and response to receiving information related to his/her condition and pain.  

![Grade of Recommendation = C]

The wording of this recommendation has been changed to emphasize the person's past pain experience as part of a comprehensive pain assessment. Previous pain experience and pain history may impact on current pain status. As a result, pain history and any resulting distress should be a component of a comprehensive pain assessment.

**Additional literature supports:**
Alamo et al., 2002; APS, 2005; Bird, 2003; Brown, 2004; ICSI, 2006; Kleiber et al., 2001; Krulewitch, 2000; Van Dijk et al., 2001; Van Dijk et al., 2002
### Practice Recommendations Part A:
#### Assessment – Reassessment and Ongoing Assessment of Pain

<table>
<thead>
<tr>
<th>7. Pain is reassessed on a regular basis according to the type and intensity of pain and the treatment plan.</th>
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<tbody>
<tr>
<td>■ Pain intensity and function (impact on activities) is reassessed at each new report of pain and new procedure, when intensity increases, and when pain is not relieved by previously effective strategies.</td>
</tr>
<tr>
<td>■ Effectiveness of intervention (both pharmacological and non-pharmacological) is reassessed after the intervention has reached peak effect (e.g., for opioids: 15-30 minutes after parenteral opioid therapy; 1 hour after immediate release analgesic).</td>
</tr>
<tr>
<td>■ Acute post-operative pain should be regularly assessed as determined by the operation and severity of pain, with each new report of pain or instance of unexpected pain, and after each analgesic, according to peak effect time.</td>
</tr>
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</table>

**Grade of Recommendation = C**

The wording of the recommendation has been changed to emphasize the need for the nurse to conduct a reassessment of pain intensity/severity following implementing a pain intervention (either pharmacological or non-pharmacological) to determine its efficacy.

Additional literature supports:
- APS, 2005; Bird, 2003; Brown, 2004; Jensen & Chen, 2002; Van Dijk et al., 2001; Van Dijk et al., 2002; Voepel-Lewis et al., 2002

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<tr>
<th>8. The following parameters should be monitored on an ongoing basis in persistent pain situations:</th>
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<tbody>
<tr>
<td>■ current pain intensity, quality and location;</td>
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<tr>
<td>■ intensity of pain at its worst in past 24 hours, at rest and on movement;</td>
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<tr>
<td>■ extent of pain relief achieved – response (reduction on pain intensity scale);</td>
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<tr>
<td>■ barriers to implementing the treatment plan;</td>
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<tr>
<td>■ effects of pain on ADL’s, sleep and mood;</td>
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<td>■ adverse effects of medications for pain treatment (e.g., nausea, constipation);</td>
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<tr>
<td>■ level of sedation; and</td>
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<tr>
<td>■ strategies used to relieve pain, both pharmacological and non-pharmacological.</td>
</tr>
</tbody>
</table>

**Grade of Recommendation = C**

The wording of this recommendation has been changed to clarify that the parameters above are part of the ongoing reassessment of clients in persistent pain situations.

Additional literature supports:
- Bird, 2003; Brown, 2004; Van Dijk et al., 2001; Van Dijk et al., 2002; Voepel-Lewis et al., 2002

| 9. Unexpected intense pain, particularly if sudden or associated with altered vital signs such as hypotension, tachycardia, or fever, should be immediately evaluated. |

**Grade of Recommendation = C**

Additional literature supports:
- APS, 2005

<table>
<thead>
<tr>
<th>Practice Recommendations Part A: Assessment - Documentation of Pain Assessment</th>
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</thead>
<tbody>
<tr>
<td>10. Document on a standardized form that captures the person’s pain experience specific to the population and setting of care. Documentation tools will include:</td>
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<tr>
<td>■ Initial assessment, comprehensive assessment and re-assessment.</td>
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<tr>
<td>■ Monitoring tools that track efficacy of intervention (0-10 scale).</td>
</tr>
</tbody>
</table>

**Grade of Recommendation = C**

Additional literature supports:
- Bird, 2003; Brown, 2004; Kaasalainen & Crock, 2003; Van Dijk et al., 2001; Van Dijk et al., 2002; Voepel-Lewis et al., 2002
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<tbody>
<tr>
<td><strong>11. Document pain assessment regularly and routinely on standardized forms that are accessible to all clinicians involved in care.</strong></td>
<td><strong>Grade of Recommendation = C</strong></td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Additional literature supports:</td>
<td>Bird, 2003; Brown, 2004; Van Dijk et al., 2002</td>
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<tr>
<td><strong>12. Teach individuals and families (as proxy recorders) to document pain assessment on the appropriate tools when care is provided. This will facilitate their contributions to the treatment plan and will promote continuity of effective pain management across all settings.</strong></td>
<td><strong>Grade of Recommendation = C</strong></td>
<td>✓</td>
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<tr>
<td></td>
<td>Additional literature supports:</td>
<td>Bird, 2001; Van Dijk et al., 2002; Voepe-Lewis et al., 2002</td>
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<tr>
<td><strong>Practice Recommendations Part A: Assessment - Communicating Findings of a Pain Assessment</strong></td>
<td></td>
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<tr>
<td><strong>13. Validate with persons/care providers that the findings of the pain assessment (health care provider’s and person’s/care provider’s) reflect the individual’s experience of pain.</strong></td>
<td><strong>Grade of Recommendation = C</strong></td>
<td>✓</td>
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<td></td>
<td>Additional literature supports:</td>
<td>Alamo et al., 2002; Bird, 2003; Brown, 2004; Van Dijk et al., 2001; Van Dijk et al., 2002; Voepe-Lewis et al., 2002</td>
</tr>
<tr>
<td><strong>14. Communicate to members of the interdisciplinary team pain assessment findings by describing parameters of pain obtained through the use of a structured assessment tool, the relief or lack of relief obtained from treatment methods and related adverse effects, person’s goals for pain treatment and the effect of pain on the person.</strong></td>
<td><strong>Grade of Recommendation = C</strong></td>
<td>✓</td>
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<td></td>
<td>Additional literature supports:</td>
<td>Brown, 2004; Voepe-Lewis et al., 2002</td>
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<tr>
<td><strong>15. Advocate on behalf of the person for changes to the treatment plan if pain is not being relieved. The nurse will engage in discussion with the interdisciplinary health care team regarding identified need for change in the treatment plan. The nurse supports his/her recommendations with appropriate evidence, providing a clear rationale for the need for change, including:</strong></td>
<td><strong>Grade of Recommendation = C</strong></td>
<td>✓</td>
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<td></td>
<td>intensity of pain using a validated scale;</td>
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<td></td>
<td>change in severity pain scores in last 24 hours;</td>
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<td></td>
<td>change in severity and quality of pain following administration of analgesic and length of time analgesic is effective;</td>
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<td></td>
<td>amount of regular and breakthrough pain medication taken in last 24 hours;</td>
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<td>person’s goals for pain relief;</td>
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<td>effect of unrelieved pain on the person;</td>
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<tr>
<td></td>
<td>absence/presence of adverse effects or toxicity; and</td>
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<td></td>
<td>suggestions for specific changes to the treatment plan that are supported by evidence.</td>
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<tr>
<td></td>
<td>Additional literature supports:</td>
<td>Brown, 2004; Cavender et al., 2004; Van Dijk et al., 2002; Voepe-Lewis et al., 2002</td>
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</tbody>
</table>
16. Provide instruction to the person/care provider on:
- the use of a pain log or diary (provide a tool); and
- communicating unrelieved pain to the appropriate clinician and supporting them in advocating on their own behalf.

Grade of Recommendation = C

The wording of this recommendation has been changed to reflect that the communication related to unrelieved pain should be directed to the appropriate clinician, not exclusively the physician.

Additional literature supports:
Bird, 2003; Brown, 2004; Van Dijk et al., 2002; Voepel-Lewis et al., 2002

17. Report situations of unrelieved pain as an ethical responsibility using all appropriate channels of communication in the organization, including individual/care provider documentation.

Grade of Recommendation = C

Additional literature supports:
Brown, 2004; Van Dijk et al., 2002

18. Refer persons with persistent pain whose pain is not relieved after following standard principles of pain management to:
- a clinical team member skilled in dealing with the particular type of pain;
- a multidisciplinary team to address the complex emotional, psycho/social, spiritual and concomitant medical factors involved.

Grade of Recommendation = C

The wording of this recommendation has been changed to emphasize that the referral for persons with unrelieved persistent pain may be to any member of the clinical team skilled in pain assessment and management. The change in the wording is for clarification only, and there has been no change in the intent of the recommendation.

Additional literature supports:
Cavender et al., 2004; Kleiber et al., 2001

**Practice Recommendations Part B: Management – Establishing a Plan for Pain Management**

19. Establish a plan for management in collaboration with interdisciplinary team members that is consistent with individual and family goals for pain relief, taking into consideration the following factors:
- assessment findings;
- baseline characteristics of pain;
- physical, psychological, and sociocultural factors shaping the experience of pain;
- etiology;
- most effective pharmacological and non-pharmacological strategies;
- management interventions; and
- current and future primary treatment plans.

Grade of Recommendation = C

Additional literature supports:
Brown, 2004; Van Dijk et al., 2002; Voepel-Lewis et al., 2002

20. Provide individuals and families/care providers with a written copy of the treatment plan to promote their decision-making and active involvement in the management of pain. The plan will be adjusted according to the results of assessment and reassessment. Changes to the treatment plan will be documented and communicated to everyone involved in the implementation of the plan.

Grade of Recommendation = A

Additional literature supports:
Alamo et al., 2002; Brown, 2004; Van Dijk et al., 2002; Voepel-Lewis et al., 2002
**Practice Recommendations Part B: Management, Pharmacological Management of Pain – Selecting Appropriate Analgesics**

*Please Note:* The recommendations in this section have been reordered to reflect more closely the process of care. Advocating for referral (now Recommendation 27) is appropriate after all other aspects of analgesic selection have been considered.

<table>
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<tr>
<th>Recommendation</th>
<th>Statement</th>
<th>Grade of Recommendation</th>
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| **21.** | Ensure that the selection of analgesics is individualized to the person, taking into account:  
- the type of pain (acute, persistent, nociceptive, neuropathic);  
- intensity of pain;  
- potential for analgesic toxicity (e.g., age, renal impairment, peptic ulcer disease, thrombocytopenia);  
- general condition of the person;  
- concurrent medical conditions;  
- response to prior or present medications;  
- cost to the person and family; and  
- the setting of care. | A |

The wording of this recommendation has been changed to clarify the various pain types that need to be considered in selecting an analgesic. With regards to potential for analgesic toxicity, the indicators provided are identified as examples only, to emphasize that these are NOT the only situations where analgesic toxicity is a concern. The change in the wording is for clarification only, and there has been no change in the intent of the recommendation.

Additional literature supports:
Akrofi et al., 2005; Block et al., 2003; Cepeda et al., 2005; Devulder et al., 2005; Maltoni et al., 2005; Murat et al., 2003; Rogers & Ostrow, 2004

| **22.** | Advocate for use of the most effective analgesic dosage schedules and least invasive pain management modalities:  
- Tailor the route to the individual pain requirements and the care setting.  
- The oral route is the preferred route for persistent pain and for acute pain as healing occurs.  
- Intravenous administration is the parenteral route of choice after major surgery, usually via bolus and continuous infusion.  
- Consider using a butterfly injection system to administer intermittent subcutaneous analgesics.  
- Regional analgesia provides site-specific relief and is an effective pain management modality in certain populations and should be considered. | C |

- The intramuscular route is not recommended because it is painful and not reliable.  
*Grade of Recommendation = B*  

- Epidural patient controlled analgesia is more effective than intravenous patient controlled analgesia in certain surgical procedures and should be considered for eligible patients.  
*Grade of Recommendation = A*  

The wording of this recommendation has been changed in order to include additional pain management modalities. A meta-analysis conducted by Block et al. (2003) reviewed 100 studies that compared epidural therapy versus parenteral opioids post-operatively. They concluded that epidural analgesia, regardless of analgesic type, catheter placement (location), and type and time of pain assessment, provided better pain control compared with parenteral opioids. A Cochrane review by Nishimori et al. (2006) assessed the benefits and harms of postoperative epidural analgesia compared with systemic opioid-based pain relief for adults undergoing abdominal aortic surgery. They found that the epidural route provided better pain relief for up to three post-operative days.

Additional literature supports:
APS, 2005; Block et al., 2003; Cepeda et al., 2005; Murat et al., 2003; Nishimori et al., 2007
23. Use a step-wise approach in making recommendations for the selection of analgesics for pharmacological management to match the intensity of pain unless contraindicated due to age, renal impairment or other issues related to the drug:

- Mild to moderate pain should be treated with acetaminophen or NSAIDS unless the person has a history of ulcers or a bleeding disorder.
- Moderate to severe pain should be treated with an opioid analgesic, taking into consideration previous opioid use/dose/preparation and strategies to prevent adverse effects.

Grade of Recommendation = B

The wording of this recommendation has been changed, as it has been combined with the original Recommendation 26, to emphasize the use of a step-wise approach in selecting analgesics.

Additional literature supports:
Block et al., 2003; Cepeda et al., 2005; Devulder et al., 2005; Maltoni et al., 2005

24. Recognize that a multi-modal analgesic approach is most effective for the treatment of pain and includes the use of adjuvant medications as part of treatment for mild pain and for specific types of pain, unless contraindicated.

- Adjuvant medications such as anticonvulsants, NSAIDS and anti-depressants are important adjuncts as they provide independent analgesia for specific types of pain, such as neuropathic pain.
- Caution and starting with low doses are needed in administering adjuvant medications in the elderly who may experience significant anticholinergic and sedative adverse effects.

Grade of Recommendation = A

The wording of this recommendation has been changed, as the original recommendations 24 and 25 have been combined to emphasize the importance of a multi-modal analgesic approach. There is strong evidence to support the use of NSAIDS in combination with opioid analgesics for the management of post-operative pain (Cepeda et al., 2005). A systematic review by McNicol et al. (2007) explored the use of NSAIDS, alone or combined with opioids, for cancer pain. They concluded that NSAIDS appear to be more effective than placebo for cancer pain; that there is no clear evidence to support one NSAID over another; and that trials of combinations of NSAIDs with an opioid have disclosed either no difference (4/14 papers), a statistically insignificant trend towards superiority (1/14 papers) or a slight but statistically significant advantage (9/14 papers), compared with either single analgesic on its own.

The use of anticonvulsants is also supported in a systematic review by Wiffen et al. (2007) in those experiencing persistent neuropathic pain – this review found no evidence for the effectiveness of anticonvulsants in acute pain situations.

Additional literature supports:
Cepeda et al., 2005; Devulder et al., 2005; ICSI, 2006; Maltoni et al., 2005; McNichol et al., 2007; Wiffen et al., 2007

25. Consider the following pharmacological principles in the use of opioids for the treatment of severe pain:

- Mixed agonist-antagonists (e.g., pentazocine) are not administered with opioids because the combination may precipitate a withdrawal syndrome and increase pain.
- The elderly generally receive greater peak and longer duration of action from analgesics than younger individuals, thus dosing should be initiated at lower doses and increased more slowly (“careful titration”).
- Special precautions are needed in the use of opioids with neonates and infants under the age of six months. Drug doses, including those for local anaesthetics, should be calculated carefully based on the current or most appropriate weight of the neonate. Initial doses should not exceed maximum recommended amounts.

Grade of Recommendation = B

26. Recognize that meperidine is not recommended for the treatment of pain.

- Meperidine is contraindicated in persistent pain due to the build-up of the toxic metabolite normeperidene, which can cause seizures and dysphoria. Meperidine toxicity is not reversible by naloxone.
- Meperidine has limited use in acute pain due to a lack of drug efficacy and a build-up of toxic metabolites, which could occur within 72 hours.

Grade of Recommendation = A

The wording of this recommendation has been changed to emphasize that meperidine is not recommended in the treatment of pain.
Advocate for consultation with a pain management expert for complex pain situations which include, but are not limited to:

- pain unresponsive to standard treatment;
- multiple sources of pain;
- mix of neuropathic and nociceptive pain; and
- history of substance abuse.

*Grade of Recommendation = C*

Devulder et al. (2005) supports the need for pain guidelines that are specific to a type of pain in order to support evidence-based practice and decision-making. Practitioners should consider referring to guidelines specific to pain type, and advocating for their use in practice.

Additional literature supports:
Devulder et al., 2005

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**Practice Recommendations Part B: Management, Pharmacological Management of Pain – Optimizing Pain Relief with Opioids**

28. Ensure that the timing of analgesics is appropriate according to personal characteristics of the individual, pharmacology (i.e., duration of action, peak-effect and half-life) and route of the drug.

*Grade of Recommendation = B*

Additional literature supports:
Akrofi et al., 2005; Cepeda et al., 2005

29. Recognize that opioids should be administered on a regular time schedule according to the duration of action and depending on the expectation regarding the duration of severe pain.

- If severe pain is expected for 48 hours post-operatively, routine administration may be needed for that period of time. Late in the post-operative course, analgesics may be effective given on an “as needed” basis.
- In persistent cancer pain, opioids are administered on an “around-the-clock” basis, according to their duration of action.
- Long-acting opioids are more appropriate when dose requirements are stable.

*Grade of Recommendation = A*

Additional literature supports:
Devulder et al., 2005; Lam et al., 2001

30. Use principles of dose titration specific to the type of pain to reach the analgesic dose that relieves pain with a minimum of adverse effects, according to:

- cause of the pain;
- individual's response to therapy;
- clinical condition;
- concomitant drug use;
- onset and peak effect;
- duration of the analgesic effect;
- age; and
- known pharmacokinetics and pharmacodynamics of the drugs administered. Doses are usually increased every 24 hours for persons with persistent pain on immediate release preparations, and every 48 hours for persons on controlled release opioids. The exception to this is transdermal fentanyl, which can be adjusted every 3 days.

*Grade of Recommendation = B*

Additional literature supports:
Devulder et al., 2005; Maltoni et al., 2005
31. Promptly treat pain that occurs between regular doses of analgesic (breakthrough pain) using the following principles:

- Breakthrough doses of analgesic in the post-operative situation are dependent on the routine dose of analgesic, the individual’s respiratory rate, and the type of surgery, and are usually administered as bolus medications through PCA pumps or epidural route.

- Breakthrough doses of analgesic should be administered to the person on an “as needed” basis according to the peak effect of the drug (po/pr = q1h; SC = q 30 min; IV = q 10-15 min).

- It is most effective to use the same opioid for breakthrough pain as that being given for “around-the-clock” dosing.

- Individuals with persistent pain should have:
  - An immediate release opioid available for pain (breakthrough pain) that occurs between the regular administration times of the “around-the-clock” medication.
  - Breakthrough doses of analgesic for continuous cancer pain should be calculated as 10-15 per cent of the total 24-hour dose of the routine “around-the-clock” analgesic.
  - Breakthrough analgesic doses should be adjusted when the regular “around-the-clock” medication is increased.
  - Adjustment to the “around-the-clock” dose is necessary if more than 2-3 doses of breakthrough analgesic are required in a 24-hour period, and pain is not controlled.

Grade of Recommendation = C

The wording of this recommendation has been changed to include the use of the epidural route as an option for breakthrough medication in certain clinical situations.

Additional literature supports:
Block et al., 2003

32. Use an equianalgesic table to ensure equivalency between analgesics when switching analgesics. Recognize that the safest method when switching from one analgesic to another is to reduce the dose of the new analgesic by 25-50% in a stable pain situation.

Grade of Recommendation = C

This recommendation has been changed to reflect that the dose of the new analgesic, when switching from one analgesic to another, should be reduced by 25-50%, rather than by one-half as previously recommended.

Additional literature supports:
National Comprehensive Cancer Network, 2005

33. Ensure that alternate routes of administration are prescribed when medications cannot be taken orally, or if refractory nausea and vomiting, taking into consideration the most efficacious and least invasive route, individual preferences, care setting, cost and resources.

- Transdermal preparations for persons with persistent pain.
- Continuous subcutaneous opioid infusions for persistent cancer pain.

Grade of Recommendation = A

The wording of this recommendation has been changed for clarification; the intent of the recommendation remains unchanged.

Additional literature supports:
Block et al., 2003; Murat et al., 2003; Rogers & Ostrow, 2004

34. Recognize the difference between drug addiction, tolerance and dependency to prevent these from becoming barriers to optimal pain relief.

Grade of Recommendation = A
### Monitoring for Safety and Efficacy

**35.** Monitor persons taking opioids, recognizing that opioids used for people not in pain, or in doses larger than necessary to control the pain, or when they have not been titrated appropriately, can slow or stop breathing.

*Grade of Recommendation = A*

The wording of this recommendation has been changed to focus on the need to monitor all persons taking opioids. It was the consensus of the revision panel that there was a need to emphasis that naloxone (an opioid antagonist) should be used with caution in order to reduce the effects of opioid induced respiratory depression without completely reversing analgesia.

*Additional literature supports:*

APS, 2005

**36.** Monitor persons taking opioids for potential toxicity when the person exhibits:

- Unacceptable adverse effects such as, but not limited to, myoclonus, confusion, delirium refractory to prophylactic treatment.
- In the presence of inadequate pain relief following appropriate dose titration.

*Advocate for a change in treatment plan, as required.*

*Grade of Recommendation = C*

The wording of this recommendation has been changed for clarification, and to emphasize the need for monitoring for toxicity as a safety issue.

*Additional literature supports:*

Cepeda et al., 2005

**37.** Evaluate the efficacy of pain relief with analgesics at regular intervals and following a change in dose, route or timing of administration. Recommend changes in analgesics when inadequate pain relief is observed.

*Grade of Recommendation = C*

The wording of this recommendation has been changed to focus on the active role nurses have in identifying the need for, and recommending, a change in analgesic.

**38.** Refer to a pain specialist for individuals who require increasing doses of opioids that are ineffective in controlling pain. Evaluation should include assessment for residual pathology and other pain causes, such as neuropathic pain.

*Grade of Recommendation = C*

The wording of this recommendation has been changed to emphasize the need to refer to a pain specialist in the situations described.

### Anticipate and Prevent Common Adverse Effects of Opioids

**39.** Anticipate and monitor individuals taking opioids for common adverse effects such as nausea and vomiting, constipation and drowsiness, and institute prophylactic treatment as appropriate.

*Grade of Recommendation = A*

The wording of this recommendation remains unchanged, however the grade of recommendation has been changed to “A” as the need for prophylactic treatment of adverse effects such as constipation have been recommended in recent randomized controlled trials.

*Additional literature supports:*

Cepeda et al., 2005; Maltoni et al., 2005

**40.** Counsel patients that adverse effects to opioids can be controlled to ensure adherence with the medication regime.

*Grade of Recommendation = C*
41. Recognize and treat all potential causes of adverse effects taking into consideration medications that potentiate opioid adverse effects:

- Sedation – sedatives, tranquilizers, antiemetics.
- Postural hypotension – antihypertensives, tricyclics.
- Confusion – phenothiazines, tricyclics, antihistamines and other anticholinergics.

*Grade of Recommendation = A*

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**Practice Recommendations Part B: Management, Pharmacological Management of Pain – Anticipate and prevent common side effects of opioids – Nausea and vomiting**

42. Assess all persons taking opioids for the presence of nausea and/or vomiting, paying particular attention to the relationship of the symptom to the timing of analgesic administration. Ensure that these persons are prescribed an antiemetic for use on an “as needed” basis with routine administration if nausea/vomiting persists.

*Grade of Recommendation = C*

The wording of this recommendation has been changed, and it is now combined with the original Recommendation 45 for clarity and conciseness.

Additional literature supports:
Block et al., 2003; Cepeda et al., 2005

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43. Recognize that antiemetics have different mechanisms of action and selection of the right antiemetic is based on this understanding and etiology of the symptom.

*Grade of Recommendation = C*

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44. Assess the effect of the antiemetic on a regular basis to determine relief of nausea/vomiting and advocate for further evaluation if the symptom persists in spite of adequate treatment.

*Grade of Recommendation = C*

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45. Consult with the prescribing clinician regarding switching to a different antiemetic if nausea/vomiting is determined to be related to the opioid, and does not improve with adequate doses of antiemetic.

*Grade of Recommendation = C*

The wording of this recommendation has been changed to emphasize that the nurse should consult with the prescribing clinician (not exclusively the physician) regarding switching antiemetics. This change has been made to acknowledge the role that nurse practitioners and others play in initiating orders for treatment.

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**Practice Recommendations Part B: Management Pharmacological Management of Pain – Anticipate and prevent common adverse effects of opioids – Constipation**

46. Institute prophylactic measures for the treatment of constipation unless contraindicated, and monitor constantly for this adverse effect.

- Laxatives should be prescribed and increased as needed to achieve the desired effect as a preventative measure for individuals receiving routine administration of opioids.

*Grade of Recommendation = B*

- Osmotic laxatives soften stool and promote peristalsis and may be an effective alternative for individuals who find it difficult to manage an increasing volume of pills.

*Grade of Recommendation = B*

- Stimulant laxatives may be contraindicated if there is impaction of stool. Enemas and suppositories may be needed to clear the impaction before resuming oral stimulants.

*Grade of Recommendation = C*

- Bulk forming agents should be avoided when bowel motility is compromised, for example, with opioids.

*Grade of Recommendation = C*
The wording of this recommendation has been changed to include a statement regarding avoiding the use of bulk forming agents in the presence of decreased bowel motility. Bulk-forming laxatives are effective at providing a mechanical distention that promotes bowel function. However, adequate fluid intake is required to avoid dry, hardened stool (Pappagallo, 2001) and potential bowel obstruction. These agents should be reserved for those who are not receiving long-term opioid therapy and are able to maintain adequate hydration; caution should be taken to avoid their use in those on fluid restriction, those confined to bed or in those with strictures or partial obstruction (Herndon, 2002; Pappagallo, 2001).

Additional Literature Supports:
Herdon et al., 2002; Pappagallo, 2001

47. Counsel individuals on dietary adjustments that enhance bowel peristalsis recognizing personal circumstances (seriously ill individuals may not tolerate) and preferences.  
Grade of Recommendation = C

48. Urgently refer persons with refractory constipation accompanied by abdominal pain and/or vomiting to the appropriate clinician.  
Grade of Recommendation = C

The wording of this recommendation has been changed to reflect that referral should be to the appropriate clinician, not exclusively the physician. This change has been made to reflect the scope of nursing practice.

49. Recognize that transitory sedation is common and counsel the person and family care provider that drowsiness is common upon initiation of opioid analgesics and with subsequent dosage increases.  
Grade of Recommendation = C

Practice Recommendations Part B: Management, Pharmacological Management of Pain – Anticipate and prevent common adverse effects of opioids – Drowsiness/sedation

50. Notify the appropriate clinician of confusion or hallucinations in order to evaluate drowsiness which continues beyond 72 hours, to determine the underlying cause.  
Grade of Recommendation = C

The wording of this recommendation has been changed to reflect that referral should be to the appropriate clinician, not exclusively the physician, when confusion or hallucinations are present with drowsiness. This change has been made to reflect the scope of nursing practice.

Practice Recommendations Part B: Management, Pharmacological Management of Pain – Anticipate and prevent procedural pain

51. Anticipate pain that may occur during procedures e.g., medical tests, dressing changes, chest tube removal, line insertion/removal etc.
   ■ Combine pharmacologic (e.g., topical anaesthetic) with non-pharmacologic options for prevention.
   ■ Anticipate and prevent pain when performing procedures on infants to prevent sensitization for pain in the future.  
Grade of Recommendation = A

The wording of this recommendation has been changed to reflect an increased focus on prevention of pain in infants. The grade of recommendation has been changed to grade “A”, based on recent strong evidence in relation to prevention of procedural pain in children.

There is strong evidence from RCTs that supports the prevention of procedural pain. The use of non-pharmacological interventions, such as cognitive-behavioural therapies, along with pharmacological approaches is a valuable approach to procedure-related distress (Murat et al., 2003). A systematic review conducted by Uman et al. (2007) concluded that there is preliminary evidence that a variety of cognitive-behavioural interventions (distraction, combined cognitive-behavioural interventions and hypnosis) can be used with children and adolescents to manage or reduce pain and distress associated with needle-related procedures. They noted, however, that there is insufficient data to assess the efficacy of other psychological interventions.

Additional literature supports:
Akrofi et al., 2005; Cavendar et al., 2004; Kleiber et al., 2001; Murat et al, 2003; Rogers & Ostrow, 2004; Uman et al., 2007
52. Recognize that analgesics and/or local anaesthetics are the foundation for pharmacological management of painful procedures. Anxiolytics and sedatives are specifically for the reduction of associated anxiety. If used alone, anxiolytics and sedatives blunt behavioural responses without relieving pain.  

**Grade of Recommendation = C**

Additional literature supports:
Akrofi et al., 2005; Murat et al., 2003; Rogers & Ostrow, 2004

53. Ensure that skilled supervision and appropriate monitoring procedures are instituted when moderate sedation is used.  

**Grade of Recommendation = C**

The wording of this recommendation has been changed to update the term « conscious sedation » to « moderate sedation ». See Appendix A (pg. 20) for a definition of moderate sedation.

Additional literature supports:
Murat et al., 2003

### Practice Recommendations Part B: Management, Pharmacological Management of Pain – Patient and family education

54. Provide the person and their family/care providers with information about their pain and the measures used to treat it, using an individualized approach, with particular attention focused on strategies for the prevention and treatment of adverse effects, and the correction of myths.  

**Grade of Recommendation = A**

The wording of this recommendation has been changed to emphasize the importance of an individualized approach to patient education. Cheung et al. (2004) in an RCT explored the effect of psycho-educational interventions (specifically cognitive interventions of distraction and reappraisal) with information given prior to surgery on post-operative outcomes of Chinese women. They concluded that pre-operative information, coupled with these strategies, had significant clinical benefit in the care of women having elective hysterectomy.

Additional literature supports:
Cheung et al, 2004; Lam et al., 2001

55. Ensure that individuals understand the importance of promptly reporting unrelieved pain, changes in their pain, new sources or types of pain and adverse effects from analgesics.  

**Grade of Recommendation = C**

56. Clarify the difference between addiction, tolerance and physical dependence to alleviate misbeliefs that can prevent optimal use of pharmacological methods for pain management.  

**Grade of Recommendation = A**

- Addiction is a psychological dependence and is rare with persons taking opioids for persistent pain.
- Persons using opioids on a long-term basis for pain control may be on the same dose for years, but may require upward adjustments of dosage with signs of tolerance. Tolerance is usually not a problem and people can be on the same dose for years.
- Persons who no longer need an opioid after long-term use need to reduce their dose slowly over several weeks to prevent withdrawal symptoms because of physical dependence.

The wording of this recommendation has been changed for clarity only; there is no change to the intent of the recommendation. In a systematic review conducted by Devulder et al. (2005), it was identified that opioids are the preferred therapy for the long-term management of persistent pain. They found significant improvements in functional outcomes, including quality of life, as well as confirming that this treatment approach is associated with positive safety and efficacy. They noted, however, a need to establish the impact of physical tolerance and other outcomes, which are known to arise from long-term opioid use, on the functional status of patients.

Additional literature supports:
Brown, 2004; Devulder et al., 2005
### Practice Recommendations Part B: Management, Pharmacological Management of Pain – Effective Documentation

#### 57. Document all pharmacological interventions on a systematic pain record that clearly identifies the effect of analgesic on pain relief. Utilize this record to communicate with interdisciplinary colleagues in the titration of analgesic. The date, time, severity, location and type of pain should all be documented.

*Grade of Recommendation = C*

Additional literature supports:
Akrofi et al., 2005

#### 58. Provide the individual and family in the home setting with a simple strategy for documenting the effect of analgesics.

*Grade of Recommendation = C*

Additional literature supports:
Devulder et al., 2005

### Practice Recommendations Part B: Management, Non Pharmacological Management of Pain

#### 59. Combine pharmacological methods with non-pharmacological methods to achieve effective pain management.

*Grade of Recommendation = A*

Non-pharmacological methods of treatment should not substitute for adequate pharmacological management. Any potential contraindications to non-pharmacological methods should be considered prior to application. Selection of non-pharmacological methods should be based on individual preference, and may include strategies such as:
- Superficial heat and cold;
- Massage;
- Relaxation;
- Imagery;
- Pressure/vibration; and
- Music.

The original guideline Recommendations 62 and 63 have been combined in this modified recommendation. There is strong evidence, including randomized studies, to support the use of a combination of pharmacological and non-pharmacological approaches to pain management.

Several randomized studies of various sizes support the grade of recommendation "A" for the use of massage (Poitrowski et al., 2003), relaxation (Roykulcharoen & Good, 2004), imagery (Laurion & Fetzer, 2003), and music (Laurion & Fetzer, 2003; Voss et al., 2004). The use of music as a strategy is an addition to the original recommendation. Refer to Appendix H (pg. 22) for a listing of behavioural/cognitive interventions for acute pain.

Additional literature supports:
Antall & Krevesic, 2004; APS, 2005; Brown, 2004; Eccleston et al., 2006; Good et al., 2002; Hatton, 2002; Hatton, 2002; ICSI, 2006; Laurion & Fetzer, 2003; Mehling et al., 2005; Poitrowski et al., 2003; Roykulcharoen & Good, 2004; Taylor et al., 2005; Voss et al., 2004; Wirth et al., 2005

#### 60. Implement educational and psychosocial interventions that facilitate coping of the individual and family early in the course of treatment.

*Grade of Recommendation = A*

The recommendation has been changed to include the use of both educational and psychosocial interventions to facilitate coping. There is evidence from randomized studies on the efficacy of these interventions, and therefore the grade of recommendation has been changed to an 'A'. Cheung et al. (2003), in a controlled trial, found that psychosocial interventions, along with education pre-operatively resulted in significant positive clinical outcomes (anxiety, pain and satisfaction).

Additional literature supports:
Antall & Krevesic, 2004; Cheung et al., 2003
61. **Institute educational and psycho-educational interventions as part of the overall plan of treatment for pain management.**

   **Grade of Recommendation = A**

   This recommendation has been changed to include educational interventions, along with psycho-educational interventions, as part of a comprehensive approach to pain management. The literature continues to support the use of psycho-educational interventions as part of the plan of care. Watt-Watson et al. (2004) evaluated a preadmission education intervention to reduce pain and related activity interference after coronary artery bypass surgery. They found that although the intervention group did not have better pain management overall, they had some reduction in pain-related interference with activities and fewer concerns about taking analgesics.

   **Additional literature supports:**
   Antall & Krevesic, 2004; Barlow & Ellard, 2004; Cheung et al, 2002; Good et al., 2002; LeFort et al., 1998; McGillion et al., 2004; Roykulcharoen & Good, 2004; Schofield, 2002; Voss et al., 2004; Watt-Watson et al., 2004

62. **Recognize that cognitive-behavioural strategies combined with other approaches, including multidisciplinary rehabilitation, can be helpful strategies for treatment of persistent, non-malignant pain.**

   **Grade of Recommendation = A**

   The wording of this recommendation has been changed to emphasize that cognitive-behavioural strategies are not sufficient to manage all types of pain.

   **Additional literature supports:**
   Bogduk et al., 2005; Butter et al., 2005; Chiu et al., 2005; Cheung et al., 2002; Eccleston et al., 2006

**Education Recommendations**

63. **Nurses prepared at the entry to practice level must have knowledge of the principles of pain assessment and management.**

   **Grade of Recommendation = C**

   **Additional literature supports:**
   Ravaud et al., 2004

64. **The principles of pain assessment and management should be included in orientation programs and be made available through professional development opportunities in the organization.**

   **Grade of Recommendation = C**

   **Additional literature supports:**
   Ravaud et al., 2004

65. **Educational programs should be designed to facilitate change in nurses’ knowledge, skills, attitudes and beliefs about pain assessment and management in order to support practice across populations and settings.**

   **Grade of Recommendation = C**

   The wording of this recommendation has been changed to emphasize that there should be a specific focus on different patient populations in nursing education to support individualized patient care.

   **Additional literature supports:**
   Brown, 2004; Ravaud, 2004; Watt-Watson et al. 2004

66. **Educational programs must support translation of knowledge into practice, and must address the resources necessary to support practice (e.g., corporate standards, practice modifications, reminder systems, removal of barriers, etc.) across populations and settings.**

   **Grade of Recommendation = C**

   The wording of this recommendation has been changed to emphasize the need for an approach to education that recognizes the resources required for successful implementation, and the needs of specific patient populations and settings. Meijers et al. (2006), examined the relationship between contextual factors and research utilization in nursing and identified six factors that were statistically significant: role of the nurse, multi-faceted access to resources, organizational climate (culture), multi-faceted support, time for research activities and provision of education. The
authors concluded that overall, the results of the study were mixed and that these factors are not necessarily the only, or the most important, to nursing practice. More research needs to be conducted to identify the contextual factors that consistently enhance research utilization.

**Additional literature supports:**
Brown, 2004; Meijers et al., 2006

## Organization and Policy Recommendations

<table>
<thead>
<tr>
<th>Statement</th>
<th>Grade of Recommendation</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>67.</strong> Nursing regulatory bodies should ensure that Standards of Nursing Practice include the adoption of standards for accountability for pain management.</td>
<td>C</td>
<td>+</td>
</tr>
<tr>
<td><strong>68.</strong> Health care organizations must have documentation systems in place to support and reinforce standardized pain assessment and management approaches.</td>
<td>C</td>
<td>+</td>
</tr>
<tr>
<td><strong>69.</strong> Health care organizations must have educational resources available to individuals and families/care providers regarding their participation in achieving adequate pain relief.</td>
<td>C</td>
<td>+</td>
</tr>
<tr>
<td><strong>70.</strong> Health care organizations must demonstrate their commitment to recognizing pain as a priority problem. Policies must clearly support or direct expectations of staff that satisfactory pain relief is a priority.</td>
<td>C</td>
<td>+</td>
</tr>
<tr>
<td>A descriptive, correlational study conducted by Alley (2001) examined the influence of a formal organizational pain management policy on nurses’ pain management practices in a tertiary-care medical centre. She found that nurses’ knowledge of pain management and their sense of accountability for pain management were significantly related to knowledge of the organization’s chronic pain management policy. The implications for nursing practice include an increased understanding of the influence an organizational policy could have on improvements in pain management.</td>
<td></td>
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</tr>
<tr>
<td><strong>71.</strong> Health care organizations must ensure that resources are available to individuals, family/care providers and staff to provide effective pain assessment and management, such as access to experts in pain management.</td>
<td>C</td>
<td>+</td>
</tr>
<tr>
<td><strong>72.</strong> Health care organizations need to demonstrate support for an interdisciplinary approach to pain care.</td>
<td>C</td>
<td>+</td>
</tr>
</tbody>
</table>

In order to be successful in implementing evidence based pain care, organizations need to consider approaches for implementation that support an interdisciplinary approach to care (Rycroft-Malone, 2002) as part of the overall organizational culture.

**Additional literature supports:**
Brown, 2004; Rycroft-Malone, 2002
<table>
<thead>
<tr>
<th>73.</th>
<th>Health care organizations must have quality improvement systems in place to monitor the quality of pain management across the continuum of care.</th>
<th>✓</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A key component of successful implementation of best practices in pain care is that of evaluation and monitoring. Ongoing evaluation should occur on many levels, and include the nurses’ experience with the guideline, their adherence to the recommendations, patient experiences with their care and patient clinical outcomes (Wallin, Profetto-McGrath &amp; Levers, 2005). Refer to the guideline (pg. 87) for a summary of suggested structure, process and outcome indicators for organizations to consider in their quality improvement monitoring approaches.</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Additional Literature Supports: Wallin, Profetto-McGrath &amp; Levers, 2005</td>
<td></td>
</tr>
</tbody>
</table>

| 74. | In planning educational strategies, consider the most effective methods for dissemination and implementation of guideline recommendations. These methods include, but are not limited to:  ■ the use of a model of behaviour change to guide the development of strategies for implementation.  ■ the use of a combination of strategies to influence practice change.  ■ designing implementation strategies that take into consideration the influence of the organizational environment. | ✓ |
|      | There are numerous models that promote a structured approach to moving research evidence into practice, and change models that can be used to guide the development of strategies for implementation. It has been found through a systematic review of randomized trials that although there are many strategies to influence practice change, the most effective approach is achieved when a combination of strategies are utilized (Oxman et al., 1995). Rycroft-Malone et al. (2002) discuss the importance of the organizational environment (or culture) as a key element in a framework for implementing evidence into practice. | + |
|      | Additional literature supports: Davies, 2002; Oxman et al., 1995; Rycroft-Malone et al., 2002 |  |

| 75. | Nursing best practice guidelines can be successfully implemented only where there are adequate planning, resources, organizational and administrative support, as well as the appropriate facilitation. Organizations may wish to develop a plan for implementation that includes:  ■ An assessment of organizational readiness and barriers to education;  ■ Involvement of all members (whether in a direct or indirect supportive function) who will contribute to the implementation process.  ■ Dedication of a qualified individual to provide the support needed for the education and implementation process.  ■ Ongoing opportunities for discussion and education to reinforce the importance of best practices.  ■ Opportunities for reflection on personal and organizational experience in implementing guidelines. | ✓ |
|      | In this regard, RNAO (through a panel of nurses, researchers and administrators) has developed the Toolkit: Implementation of clinical practice guidelines based on available evidence, theoretical perspectives and consensus. The Toolkit is recommended for guiding the implementation of the RNAO nursing best practice guideline Assessment and Management of Pain. | + |
|      | Additional literature supports Dobbins, Davies, Danseco, Edwards & Virani, 2005; Graham, Harrison, Brouwers, Davies & Dunn, 2002; Meijers et al., 2006 |  |
Implementation Strategies

The Registered Nurses’ Association of Ontario and the guideline panel have compiled a list of implementation strategies to assist health care organizations or health care disciplines who are interested in implementing this guideline. A summary of these strategies follows:

- Have at least one dedicated person such as an advanced practice nurse or a clinical resource nurse who will provide support, clinical expertise and leadership. The individual should have good interpersonal, facilitation and project management skills.
- Conduct an organizational needs assessment related to pain assessment and management in order to identify current knowledge and further educational requirements.
- Create a vision to help direct the change effort and develop strategies for achieving and sustaining the vision.
- Establish a steering committee comprised of key stakeholders and interdisciplinary members committed to leading the change initiative. Identify short-term and long-term goals.
- Identify and support designated best practice champions on each unit to promote and support implementation. Celebrate milestones and achievements, acknowledging work well done (Davies & Edwards, 2004).
- Provide organizational support such as having the structures in place to facilitate best practices in pain care. For example, having an organizational philosophy that reflects the value of best practices through policies and procedures. Develop new assessment and documentation tools (Davies & Edwards, 2004).
- Pain initiatives within organizations should leverage on the standards of the Canadian Pain Society (CPS) and the Canadian Council of Health Services Accreditation (CCHSA) in order to support implementation and sustainability of practice change.

Research Gaps and Implications

In order to support nurses in the provision of optimal pain care, additional research in the following areas would benefit practice:

- Long-term effects of opioids in specific pain populations – clinical population over 20 years (non-cancer) to support evolving practices in these areas re. non-addiction.
- Research related to physical tolerance, withdrawal and addiction with long-term use of opioids.
- Coping and relationship to pain
- Administration of opioids via subcutaneous injection/infusion – efficacy of approach.

Appendices

The review/revision process did not identify a need for additional appendices; however updates to the following appendices are noted.

Appendix A: Glossary of Clinical Terms

The following terms have been added to the glossary:

**Multi-modal:** Relating to, having, or utilizing more than one mode or modality (Medline Plus, 2007). For example, multi-modal pain management involves a variety of approaches, including medications, behavioural and cognitive strategies.

**Mixed pain:** Mixed pain etiology contains both inflammatory and neuropathic components (Medscape, 2007).

**Half-life:** The time required for half the amount of a substance (e.g., a drug) introduced into a living system to be eliminated or disintegrated by natural processes (Medline Plus, 2007).

**Peak effect:** The amount of medication in the blood that represents the highest level during a drug administration cycle (Mosby, 2006).

**Non-communicative:** An individual who is unable to communicate through verbal, written or technology supported means.

The following term has been revised as found in the guideline (pg. 98):

**Conscious sedation:** This term has been replaced with the term “moderate sedation”, which is defined as a drug-induced depression of consciousness during which patients respond purposefully to verbal command (e.g., open your eyes either alone or accompanied by light tactile stimulation, such as a light tap on the shoulder or face, not a sternal rub). No intervention is required to maintain a patent airway and spontaneous ventilation is adequate. Cardiovascular function is usually maintained (Cote, Wilson & Work Group on Sedation, 2006).
Appendix B – Pain Assessment Tools for Neonates, Infants and Children

The following tools have been added as examples of validated tools that clinicians may which to use in order to meet the assessment needs of specific pediatric populations.

Sample 1: Non-communicating Children’s Pain Checklist (NCCPC):
This tool has demonstrated preliminary validity and reliability for measuring pain in children with severe cognitive impairments, and details of this tool have been included in this supplement by panel consensus. It may be used with children experiencing post-operative pain (NCCPC-PV), or with children in long-term care or at home (NCCPC-R). The NCCPC-PV contains six subscales (vocal, social, facial, activity, body and limbs, physiologic signs) and measures 27 variables during a 10 minute observation. During the observation, the observer rates each variable on a 3 point scale (not at all – 1 to very often – 3), which are then added to provide a total score.

References:

Sample 2: Faces Pain Scale – Revised (FPS-R)
The Wong-Baker Faces Scale, included in the original guideline (pg. 101) as a sample assessment tool for pediatric pain assessment, has been replaced with the Faces Pain Scale – Revised. The revised scale has six faces, numbered 0, 2, 4, 6, 8, 10 (Wong-Baker uses a 0-5 point scale) which has a strong positive correlation to the numeric 0-to-10 scale. The faces on this scale don’t illustrate smiles or tears (as does the Wong-Baker scale), which reduces the potential for confusion based on facial expression. The neutral anchors used in the Faces Pain Scale – Revised are considered to be more appropriate for children. It is available in English, French and twenty-four other languages.

References:
- The Faces Pain Scale – Revised is available online at: Pediatric Pain Sourcebook of Protocols, Policies and Pamphlets. www.painsourcebook.ca.

Appendix C – Sample Questions for Baseline Assessment of Pain

There are several mnemonics noted in the literature that can be used to structure a baseline assessment of pain. In addition to the PQRST approach, clinicians may want to consider using one of the following mnemonics, based on the needs of the practice setting:

SAMPLE 1: PAINED
- Place – Location of the pain (could be multiple sites).
- Amount – Refers to pain intensity (10 point scale), onset, duration, pattern of pain.
- Intensifiers – What makes the pain worse? (i.e., activity, position, time of day, stress, etc.).
- Nullifiers – What makes the pain better? (i.e., type and amount of medication, non-pharmacological methods).
- Effects – Effect of pain on quality of life (i.e., functional status, sleep, appetite, social interactions); adverse effects of analgesics.
- Descriptors – Description of the quality of the pain (i.e., aching, throbbing, burning, stabbing, pressure, etc.).

SAMPLE 2: OLDCART
- Onset – When did the pain start?
- Location – Where is your pain? (Could be multiple sites).
- Duration – How long does your pain last? Is it persistent or periodic?
- Characteristics – What does it feel like? Is it burning, sharp, shooting, throbbing, etc?
- Aggravating Factors – What makes your pain worse (e.g., walking, moving, breathing, turning, chewing).
- Relieving Factors – What makes your pain better? Ask about any non-pharmacological approaches.
- Treatment – What medications work for you? Do you have side effects from your medications?
Appendix E – Tools for Assessment of Pain in Adults

Checklist of Non-verbal Pain Indicators (CNPI)
The Checklist of Nonverbal Pain Indicators was designed to measure pain behaviours in cognitively impaired older adults post-operatively. It is an observational tool that includes six behaviours that are scored at rest and on activity – the presence of a pain indicator is scored as 1, while the absence of the indicator is scored as 0. The subscores (at rest and on activity are summed), as well as a total score. The six indicators are: verbal complaints (non-verbal: moans, groans, cries, gasps); facial grimaces/wincing (furrowed brow, clenched teeth); bracing (clutching or holding onto side rails, bed, or affected area during movement); restlessness (shifting of position [constant or intermittent], inability to keep still); rubbing (massaging affected area); vocal complaints (words expressing discomfort or pain – “that hurts”, “ouch”, cursing during movement, etc.). There is no specific cut-off score to indicate pain severity, however the presence of any of the behavioural indicators may be indicative of pain, and requires further assessment, intervention and monitoring by the clinician.

References:

When conducting a comprehensive pain assessment, consideration should be given to the impact of pain on the individual’s function (functional ability and functional status). Refer to the Brief Pain Inventory, which has a subscale that incorporates the key components of a functional assessment.

Appendix G – Sample Subcutaneous Injection Protocol

Appendix G (pg. 124 of the guideline) provides a sample of a subcutaneous injection protocol to support clinical practice in the administration of medications by injection. The panel reviewed the literature related to the “single-site” versus “multi-site” approach; however there was no evidence to recommend one particular protocol. Therefore, the panel reached consensus on providing an example protocol for each of the two approaches, recognizing that neither has been validated. Organizations are advised to consider these protocols as examples only, and to recognize that policy development related to this care must consider legislation, mission, vision, values and unique features of each organization. The two sample protocols are available for download on the RNAO website at www.rnao.org/bestpractices.

Appendix H – Non-pharmacological Methods of Pain Control

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Various strategies can enhance or complement pharmacological interventions, which may include behavioural/cognitive interventions or physical modalities. Not all interventions are effective for all persons with pain, and determining the most appropriate choice can be challenging (ICSI, 2006). The following summary is intended to supplement the interventions identified in the guideline (pg. 126).
### Behavioural/Cognitive Interventions for Acute Pain

<table>
<thead>
<tr>
<th>Type of Treatment</th>
<th>Description</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioural/Cognitive Interventions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desensitization</td>
<td>Systematic gradual exposure to feared situations or objects.</td>
<td>Decrease anxiety.</td>
</tr>
<tr>
<td>Positive reinforcement</td>
<td>Positive statements and tangible rewards after a painful procedure.</td>
<td>Transform meaning of pain from a punitive to challenging event.</td>
</tr>
<tr>
<td>Relaxation</td>
<td>Progressive relaxation of muscle groups combined with controlled breathing.</td>
<td>Decrease anxiety and pain.</td>
</tr>
<tr>
<td>Preparation</td>
<td>Explaining the steps of the procedure and providing sensory information about previous procedures.</td>
<td>Help child to develop a realistic expectation about a procedure.</td>
</tr>
<tr>
<td>Memory change</td>
<td>Helping child to more positively reframe any negative memories about previous procedures.</td>
<td>To reduce anticipatory distress and, over time, procedural distress, through realistic memories.</td>
</tr>
<tr>
<td>Hypnosis</td>
<td>Dissociate from painful experience through involvement in imagined fantasy that is fun and safe.</td>
<td>Take focus away from procedure and enhance sense of mastery through metaphor in imagined experience.</td>
</tr>
<tr>
<td>Thought stopping and positive self-statements</td>
<td>During times of anxiety, the child repeats “stop” when anxious thoughts occur, and repeats a set of positive thoughts.</td>
<td>Replace catastrophic thinking and reduce anxiety.</td>
</tr>
<tr>
<td>Distraction</td>
<td>Techniques include counting, blowing bubbles, or talking about topics unrelated to the procedure.</td>
<td>Shift attention away from the procedure and pain onto more enjoyable things.</td>
</tr>
<tr>
<td>Modeling and rehearsal</td>
<td>Demonstration of a mock procedure by another child or adult who demonstrates positive coping behaviours; children can then practice procedure using coping techniques.</td>
<td>Provide information about the procedure and suggest helpful strategies that can be used during procedure to cope with pain and anxiety.</td>
</tr>
</tbody>
</table>

Other approaches that may be successful include:
- Verbal preparation and communication with health care providers
- Sensorimotor strategies: especially with infants, the use of pacifiers, swaddling, rocking and holding
- Imaginative involvement: especially with children, using imaginative stories or “pain switches” or “anesthetic gloves”
- Physical strategies: application of heat or cold, massage, immobilization, rest or exercise
- Music, art and play therapies


The “Toolkit” is available through the Registered Nurses’ Association of Ontario. The document is available in a bound format for a nominal fee, and is also available free of charge off the RNAO website. For more information, an order form or to download the “Toolkit”, please visit the RNAO website at www.rnao.org/bestpractices.